# JOURNAL
## OF AMERICAN INSURANCE

NOVEMBER, 1961 Vol. 37, No. 11

U. S. Property—Yours

Strike Prevention That Works

Feats With Tons of Flour

Science Delves Into Driving

Money on Humanity's Mission

Too Many Burned-Out Jobs

# JOURNAL
## OF AMERICAN INSURANCE

NOVEMBER, 1961 Vol. 37, No. 11

1 *Behold Your Property*

5 *Off to Work They Go*

8 *There's Gold in This Grain*

12 *Test-Tube Driving*

15 *Annals—Thanksgiving Prelude*

16 *Dollars of Hope and Help*

18 *Big Wheels on Our Roadways*

22 *Professionals of Protection*

24 *Blackout on Jobs*

28 *Four Squares for Safety*

30 *Crackdown on Bootleg Bennies*

33 *Close-Ups of Our Commissioners—Silva*

FRONT COVER—*Corn Hill of Pilgrim Fame*

BACK COVER—*Pilgrim Memorial Monument, Provincetown*

*Massachusetts Department of Commerce*


## OUR COVERS

PLYMOUTH ROCK, Thanksgiving and insurance all have a common precursor in Corn Hill, depicted on our front cover as the hallowed spot that it is near Truro, Massachusetts. There, even before they had found the Plymouth harbor-haven, the famished Pilgrims found precious food after their historic first landing from the Mayflower at Provincetown on November 11, 1620. There the thanksgiving they uttered for the safe journey and for the mysterious manna was to be re-echoed and amplified in the first Thanksgiving a year later at Plymouth. And there, in the cache of their corn, the American Indians had demonstrated the prudence of insuring against the uncertainties of the future.

To the trilogy of Corn Hill, the Mayflower and Plymouth Rock there has been added in more modern times the Pilgrim Memorial Monument in Provincetown (back cover, and *Annals*, page 15). Against a background of 290 years of history, it was erected in 1910 to memorialize both the first landing of the Pilgrims on these shores and the pre-landing adoption of the *Mayflower Charter*.

---

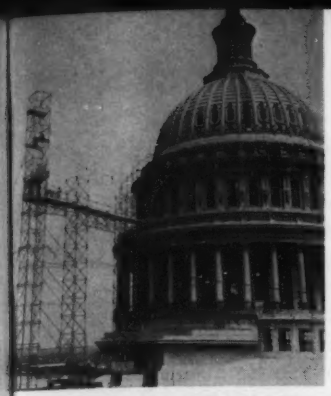

*Journal of American Insurance* is published monthly by the American Mutual Insurance Alliance, 20 N. Wacker Drive, Chicago 6, Ill.

NEWELL R. JOHNSON, *General Manager*
FREDERICK J. KEILHOLZ, *Editor*
L. A. FITZGERALD, *Assistant Editor*
DONALD W. SEGRAVES
RICHARD C. BJORKLUND
WILLIAM M. SCHIBUR



Copyright 1961 by American Mutual Insurance Alliance, Chicago. For permission to reproduce material from the Journal and for information about reprints write to *Journal of American Insurance*, Editorial Offices, 20 North Wacker Drive, Chicago 6, Illinois.

Columns of the *Journal of American Insurance* are open to public-interest matters directly or indirectly related to insurance, but opinions expressed are not necessarily endorsed by the American Mutual Insurance Alliance.



Our U. S. Capitol, nation's most photographed symbol of public pride and property, is ensured to the future by recent repairs and extensions. *Stainless Steel Producers*

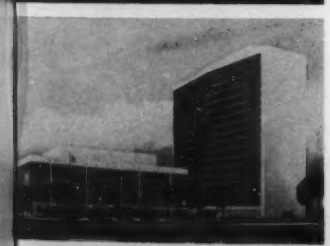
New combined Post Office and Federal Office Building for New Orleans of glass-masonry design. It was estimated to cost $21 million as approved.

# BEHOLD YOUR PROPERTY

**COST (IN MILLIONS)**

| AGENCY | | United States | U. S. territories and possessions | Foreign countries | Total | Percentage of total cost |
|---|---|---|---|---|---|---|
| DEFENSE: | Military functions | $26,496 | $1.180 | $4,227 | $31,903 | 60.6 |
| | Civil functions | 4,802 | 1 | — | 4,803 | 9.2 |
| | Total, defense | 31,296 | 1,181 | 4,227 | 36,706 | 69.8 |
| CIVIL AGENCIES: | Interior | 4,557 | 9 | — | 4,566 | 8.7 |
| | Atomic Energy Commission | 3,141 | — | 26 | 3,167 | 6.0 |
| | Tennessee Valley Authority | 1,753 | — | — | 1,753 | 3.3 |
| | General Services Administration | 1,295 | — | 31 | 1,326 | 2.5 |
| | Veterans Administration | 1,195 | 1 | — | 1,196 | 2.3 |
| | Agriculture | 1,059 | 2 | — | 1,061 | 2.0 |
| | Other civil agencies (20) | 1,957 | 655 | 231 | 2,843 | 5.4 |
| | Total, civil agencies | 14,957 | 667 | 288 | 15,912 | 30.2 |
| TOTAL | | $46,255 | $1,848 | $4,515 | $52,618 | 100 |

Bismarck, capital of North Dakota which joined the Union 72 years ago this month, now has this new Post Office and Courthouse worth about $4 million.



Denver's new Federal Building, costing about $20 million, is to house many U. S. agencies in lens-shaped unit at right, with the Courthouse joined.

Costing an estimated $76 million when completed, the New York Federal Building combines the U. S. Customs Court with tower for 18 agencies.

*Four photos, General Services Administration*

## *It exceeds $52 billion in U. S. holdings with vast protective and loss prevention problems.*

ONCE THERE WAS A WOMAN with such proprietorial interest in public buildings she thought the Red Room of the White House would look better with a fire in it. Forthwith she lighted one under a chair.

That is frowned upon. But a decorous spirit of possessiveness is permissible. It is even encouraged as commendable. For Americans have a vested interest in $52.6 billion worth of U. S. real property distributed over our home shores, in 7 U. S. territories and possessions, and in 110 foreign countries.

Not even the woman of Red Room fame will ever be able to satisfy her interest by seeing all

that property. It is spread over 772 million acres and includes more than 400,000 buildings in the U. S. alone. The land area is larger than four and one-half Texases, but almost all of it, 771.5 million acres, is in the U. S.

Included in the inventory of $52.6 billion worth of real property are all land, buildings, and other structures and facilities owned by the U. S. throughout the world. Eighty-eight per cent of the holdings are in the U. S., 3.4 per cent of them in U. S. territories and possessions, and 8.6 per cent of them in foreign countries.

Protection of government buildings and property entails a sum of more than $7 million annually in the federal budget. Yet that is only a fraction of the total annual budget of more than $110 million for buildings management.

The protective program of the Public Buildings Service, General Services Administration, as depicted in the accompanying chart, is representative but not all-inclusive of the herculean task of vigilance over government buildings and property. GSA's responsibilities are to the executive branch of the Federal Government.

Fire prevention and other safeguards of the GSA are commended to all property owners by the mutual property and casualty insurance industry. More than 200 years ago the essential principles of such loss prevention were pioneered by Benjamin Franklin in his founding of successful mutual fire insurance. Franklin, in fact, crusaded for a loss prevention creed which would rate as a worthy antecedent for this stewardship of the GSA:

"It is the policy of the GSA to maintain an aggressive, effective and intensive accident and fire prevention program for the purpose of:

(1) Protecting employees and property under the custody of GSA;

(2) Protecting personnel and property of federal agencies occupying GSA buildings and premises; and

(3) Protecting the public using facilities and service provided by GSA.

"Management, supervisors and all other employees shall use every practical means to eliminate or control all accident, fire and occupational health hazards and to incorporate safe operating practices and procedures as an integral part of every activity."

In reduction of employee injuries alone, more than $15 million has been saved in a 10-year record amassed by the GSA. In that time the accident rate among GSA employees has been reduced 63 per cent with a saving of more than 7 million man-hours of production.

An even more impressive reduction—71 per cent—has been made over a seven-year period in the rate of GSA motor vehicle accidents. A frequency of 4.07 accidents per 100,000 miles in 1952 was brought down to 1.16 in the 1959 fiscal year.

Fire has been the dread spoiler of government vigilance ever since July 31, 1792. On that date the first building of the U. S. Government began to take form with the laying of the cornerstone for the Philadelphia Mint. From the first to the last of government buildings, not even the White House has been immune from fire. The British burned it on August 24, 1814, in a far more serious fire than the one lighted under the chair by the woman visitor in the Red Room.

But over the years the government's fire

# GOVERNMENT PROPERTY PROTECTION PROGRAM

## *General Services Administration*

### PURPOSE

SAFEGUARDING people and property from injury, loss or damage by fire, accident, theft, natural disaster or enemy attack, thus increasing operating efficiency through:

REDUCED

- Loss of time owing to injury
- Medical leave and compensation costs
- Property losses
- Human suffering

FEWER

- Tort claims
- Interruptions to operations

### SCOPE

PROGRAM RESPONSIBILITIES are GSA-wide and include non-GSA operated buildings:

**PEOPLE**

Millions daily:

- 29,000 GSA personnel
- 490,000 building occupants
- Visitors and contractors' personnel

**REAL PROPERTY**

- 160 million square feet in 11,000 buildings
- Office buildings, Post Offices and PHS hospitals
- 91 stockpile storage locations
- 14 GSA stores depots
- 22 GSA-OCDM stores depots
- 22 records centers

**PERSONAL PROPERTY**

Billions of dollars in:

- DMS strategic and critical materials — $4 billion
- OCDM emergency stockpile $100 million
- FSS warehouse contents $52 million
- Motor vehicles — 19,000
- Building contents, including 7½ million cubic feet of government records

### METHODS

ISSUE guides and standards, based on . . .

- Past experience
- Analyses of current fires, accidents and thefts
- Tests and evaluations of devices and equipment
- Accepted practices of recognized protection organizations

ESTABLISH employee participation through . . .

- Top management support
- Training sessions
- Group meetings, councils, etc.
- Contests and campaigns
- Visual information media (Posters, bulletins, displays, etc.)

PREVENT unsafe acts by . . .

- Working closely with supervisors to make safe work practices a part of every job

CORRECT unsafe conditions by . . .

- Reviewing plans and operations
- Inspecting, locating and eliminating
- Improving structures and equipment
- Safety devices: Protective clothing, etc.

PROVIDE physical safeguards, with . . .

- Detection devices, sprinklers, alarms, etc.
- Trained guards, fire marshals, etc.
- Enclosures, lights, handrails, vaults, etc.

ORGANIZE for emergencies, enemy attack, etc. with . . .

- Self protection groups
- Evacuation drills and orientations
- Shelter areas
- Radiological monitoring
- Decontamination planning
- Damage assessment

### PROTECTION INSURANCE

Protecting employees is no less urgent than protecting property. Prompt and safe evacuation of a government building in the Washington area is here supervised by GSA guards from a corps of 2,700.

In three minutes these employees evacuated their 10-floor Morgan Station Post Office Building in New York during a Fire Prevention Week drill. Floor space in building totals 1,100,000 square feet.

Everyone in the community backs the award-winning fire prevention program at Los Angeles Veterans Administration Center. It is the largest of VA Centers, occupying 300 buildings on 700-acre tract.

record has been commendably better than that for the country as a whole. Unfortunately 1960 was a black year owing chiefly to a single calamitous fire. Until then, the 10-year statistics showed that the government's annual loss for buildings and contents averaged only $2.79 per capita (for more than 4 million federal civilian employees and military personnel), while the loss for the nation as a whole averaged $5.59 per capita (based on an average national population of 164 million). The figures are for buildings and contents losses in the continental U. S., and do not include forest fires or fires at overseas installations.

The record-ruining 1960 fire was caused by an airplane crashing into parked aircraft and a hangar, resulting in $20 million worth of damage and causing four deaths. Total federal losses for fiscal 1960 were $33 million, 25 deaths and 339 personal injuries in 15,334 fires averaging 1,277 a month.

About two-thirds of all fires from known causes on government property can be traced to (1) electricity, (2) matches and smoking, (3) flammable liquids, and (4) stoves, furnaces and boilers. That makes fire prevention and protection "everyone's job," but the "official advisory agency" in fire safety matters is the Federal Fire Council. It was organized in the GSA in April, 1930, following fires in three federal buildings within a few months and at a time when most agencies were without adequate fire protection staffs.

**Fire Council Aided by Mutual Insurance**

Now, with more than 200 members who are official designees of 49 federal departments and establishments, the Federal Fire Council is pushing a vigorous program to further reduce fire losses, injuries and deaths.

As an organization member of the National Fire Protection Association, the Federal Fire Council promotes the annual Fire Prevention Week throughout the various government agencies. Widely used in this effort has been *Tested Activities*, a roundup of effective fire-prevention ideas compiled by the Federation of Mutual Fire Insurance Companies of the American Mutual Insurance Alliance from communities and agencies throughout the country.

Currently top-ranking among government agencies in fire prevention and control is the Veterans Administration Center, Los Angeles, California. It won the grand award in the government division of the 1960 fire prevention contest of the National Fire Protection Association. It was also the first-place winner in the division for veterans facilities and other hospitals. The GSA itself had the first-place winner in the division for government buildings and operations in an entry from Region 5, Chicago, while the New York City Post Office was the first place winner in that division.

Under the creedal objective that protection is everyone's job, every effort is made throughout the GSA to train all employees to do their part in preventing unsafe acts and in correcting unsafe conditions, according to William H. Alexander, commissioner of Public Buildings Service.

In addition GSA employs approximately 2,700 guards (1,500 for normal protection, augmented by special security protection provided for other agencies), 250 fire fighters and fire marshals and approximately 40 protection assistants, including fire prevention engineers, safety engineers and other professionally trained personnel. Invariably the visitor to a government building or installation first sees a guard or contacts one for information.

Public interest in government property is at an all-time high in the 185-year history of the nation, evidenced by the record number of 1961 visitors at the White House, which has its own police force. The Executive Mansion had its one-millionth visitor of the year in August, months before it rounded out its 161st year of occupacy dating from November, 1800, and its 169th year as Washington's first public building, dating from the cornerstone laying on October 13, 1792. Previously a year's record for White House visitors had been 977,142 in 1960.

In all the government's vast domain of $52.6 billion worth of real property, the one building that probably best epitomizes the public's pride, investment and protective instincts is the National Capitol, on one of the world's famous parkways.

It has stood for more than a century and a half with "durability and calm strength . . . like an idea aimed to last through the ages . . ." And as one of the most photographed structures in the world, it gives Americans a lasting reminder to behold their property—and their heritage. ⊙

# OFF TO WORK THEY GO

*How mutual insurance helps management avert work stoppages by job and plant safety.*

A UTOPIAN PERIOD of no strikes and no work stoppages once prevailed on the American scene. There were no jobs, either, except a few clandestine ones. But that was during the colonial period when the British Acts of Trade were in effect. Americans of those times, as William Pitt declared, were not to be permitted "to manufacture a lock of wool or a horseshoe or a hobnail."

Today, as the world's leading industrial nation, the U. S. has a total civilian labor force of about 73 million men and women. For one reason or another, there have been approximately 94,000 strikes and work stoppages within that labor force during the past 25 years alone.

But there have been notable advances, too, helped along by mutual insurance in the field of safety and loss prevention. One sidelight is that while the nation's industrial force has more than doubled in the past half century, the number of fatalities in work accidents has been halved.

Furthermore, the number of man-days lost in strikes from all causes was the lowest during the first six months of 1961 of any comparable period since World War II. The total was 6,720,000 in official figures of the U. S. Department of Labor. And for the whole of 1960, strike activity as measured by number of stoppages and workers involved, declined to the lowest level since 1942.

One old trouble spot—shop conditions and policies—was a bright spot in the 1960 labor picture. This is a prime area where mutual insurance has been assisting management to practice safety and loss prevention with telling effect. This area accounted for less than 6 per cent of the 19 million man-days lost during the year in work stoppages. Its total in man-days idle was 1.1 million. And it was blamed for only 380 of the total 3,333 stoppages.

Leading labor mediators and arbitrators doubt that a cure for every ailment can be packaged into the federal strike-curb law now being devised in Washington. But mutual insurance has demonstrated that loss prevention and safety programs can minimize shop-condition grievances and strikes.

Here, from files of the Division of Wages and Industrial Relations, U. S. Department of Labor, are random examples of 1960 work stoppages of the type mutual insurance engineers have been preventing for years.

This first one is from the beverage industry. The company wanted to stack beer cases seven high on fork-lift pallets. The union claimed more than six were unsafe, as it was impossible for the driver to see over the seventh layer. If a driver cannot see over his load, the union claimed, he runs the machine backwards, breathing in the dangerous exhaust fumes from a gasoline-powered outfit. The work stoppage lasted five days. Then the company and union agreed that, in loading or unloading operations, the pallet load on a gasoline fork-lift truck would be six high.

On a construction job there was objection to hazardous working conditions on a 22-story office building. Chief complaint was the unbarricaded open elevator shafts from the 12th to the 22d floors. Union contended that workers below narrowly escaped injury from debris falling down the shaft. Other complaints included poor lighting in the corridors and debris left in the building (poor housekeeping, on mutual engineers' blacklist). Following an eight-day stoppage, workmen returned after the conditions were corrected.

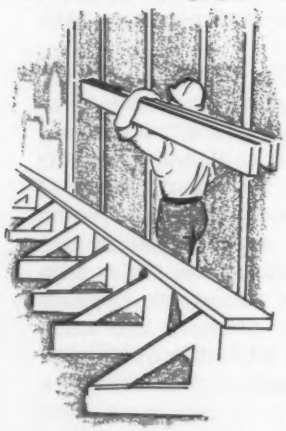
On a telephone industry job, the cable crew was working along a highly traveled road with

Orderly in-plant traffic reduces accident numbers

## *Off to Work They Go*

one man assigned to work alone in a manhole. When he refused, he was suspended, whereupon the balance of the crew refused to work. The company then suspended the entire crew. When the men returned, following the lifting of the suspension, the same assignment was made at the manhole. The union still considered this an unsafe operation and hired an auxiliary policeman as a manhole guard pending settlement.

All such hazards are militated against by mutual insurance through its fundamental purpose to reduce the cost of insurance by reducing losses. Where physical property is involved, care is taken to see that conditions of construction, maintenance and operation are such that the accident risks are reduced to a minimum. Where workmen's compensation insurance is involved, as it is on most jobs today, mutual companies have trained engineering staffs to assist policyholders in reducing the possibilities of accidents. Mutual companies also crusade for fire prevention, safe driving, for courtesy and consideration to the other fellow, and for extraordinary care where children are involved.



Protection in stout railings and firm platforms

Hazards such as those cited for strikes and work stoppages never occur or are corrected forthwith in the preplanning which mutual engineers and policyholders do for maximum safety and loss prevention on jobs and in plants. This preplanning encompasses layout, building, tools, processes, materials and procedures.

Overstacking of beer cases, for example, which brought on the work stoppage in the beverage industry, is just one of the traffic-control problems with fork lifts and power trucks. Mutual engineers check plants and jobs for both physical and operational traffic hazards. They make detailed studies for safe routing of traffic and will even help set up driver training programs. Running a fork-lift truck backwards would be ruled out even if the operator didn't have to breathe the exhaust fumes.

Preplanning corrects the hazards before job begins

Job-stopping open elevator shafts, referred to in the construction industry, are the antithesis of what prevailed on such jobs as the University of Illinois Assembly Hall, Champaign-Urbana, and Chicago's McCormick Place where mutual insurance engineers preplanned for barricades, handrails, stout work platforms and ladders and other protective devices. Scaffold walkways, when conditions call for them, are even edged with toe boards to prevent tools or other objects dropping onto workmen below.

Preplanning for safety on highway and roadside jobs often entails protection for an entire crew rather than for one man, as was the case in the telephone cable job. Mutual engineers have helped contractors reduce their insurance costs by reducing accidents on country-road jobs as well as on big-scale projects such as the Florida Turnpike and the Indiana Toll Road.

Management often must persuade workmen to forgo their own foolhardiness. It is not uncommon, for instance, to find garage workers using gasoline as a solvent, in which case they are quickly converted to the use of a safe solvent.

"Squeak" instrument is a protector against cave-in

Mutual engineers have compiled a whole catechism of employee sins against which they inveigh with safety

and loss-prevention teachings that save lives, prevent work stoppages and even avert strikes. Some examples: using equipment without authority . . . insecure or disorderly piling or arranging of material . . . operating equipment at unsafe speed . . . using defective tools or equipment . . . unsafe loading of trucks, skids, racks and conveyors . . . lifting improperly, or handling loads that are too heavy . . . using improper tools or equipment . . . making guards or safety devices inoperative . . . failure to use protective equipment such as safety glasses and safety shoes . . . repairing or adjusting in-motion machinery or pressurized or energized equipment . . . horseplay.

One of the worst hazards ever corrected by one mutual engineer before it became a man-killer and a strike breeder was a six-foot plant hopper into which a loading machine dumped bulk material for grinding. The hopper, in an open pit, was fitted with huge rotary blades which chopped the material into minute particles before it was picked up by the conveyor belt and carried to the bagging operation. One man was assigned to clean up scrap which fell off the belt and dump it back into the hopper by wheelbarrow.

"If the fellow had ever fallen into that hopper," said the mutual engineer, "they'd have had to pick him up with a pair of tweezers." A guard-rail was immediately put up around the hopper pit.

When they cannot correct a hazard right on the spot, mutual engineers take the problem into their research centers. Out of these centers, augmented by years of experience, has come a whole arsenal of safety and loss prevention measures. These include, for example, a microseismic instrument that picks up the squeaks made by rock under strain, making it possible to detect within two hours time when a tunnel will collapse. To prevent slips and falls, there is a machine for accurately measuring the slipperiness of floors in plants, stores and offices. A unique mask with a breathing apparatus made of layers of aluminum mesh keeps workers comfortable in torrid drying-kiln heat even at temperatures as high as 240 degrees F.

Slipperiness sleuthing to eliminate dangerous falls

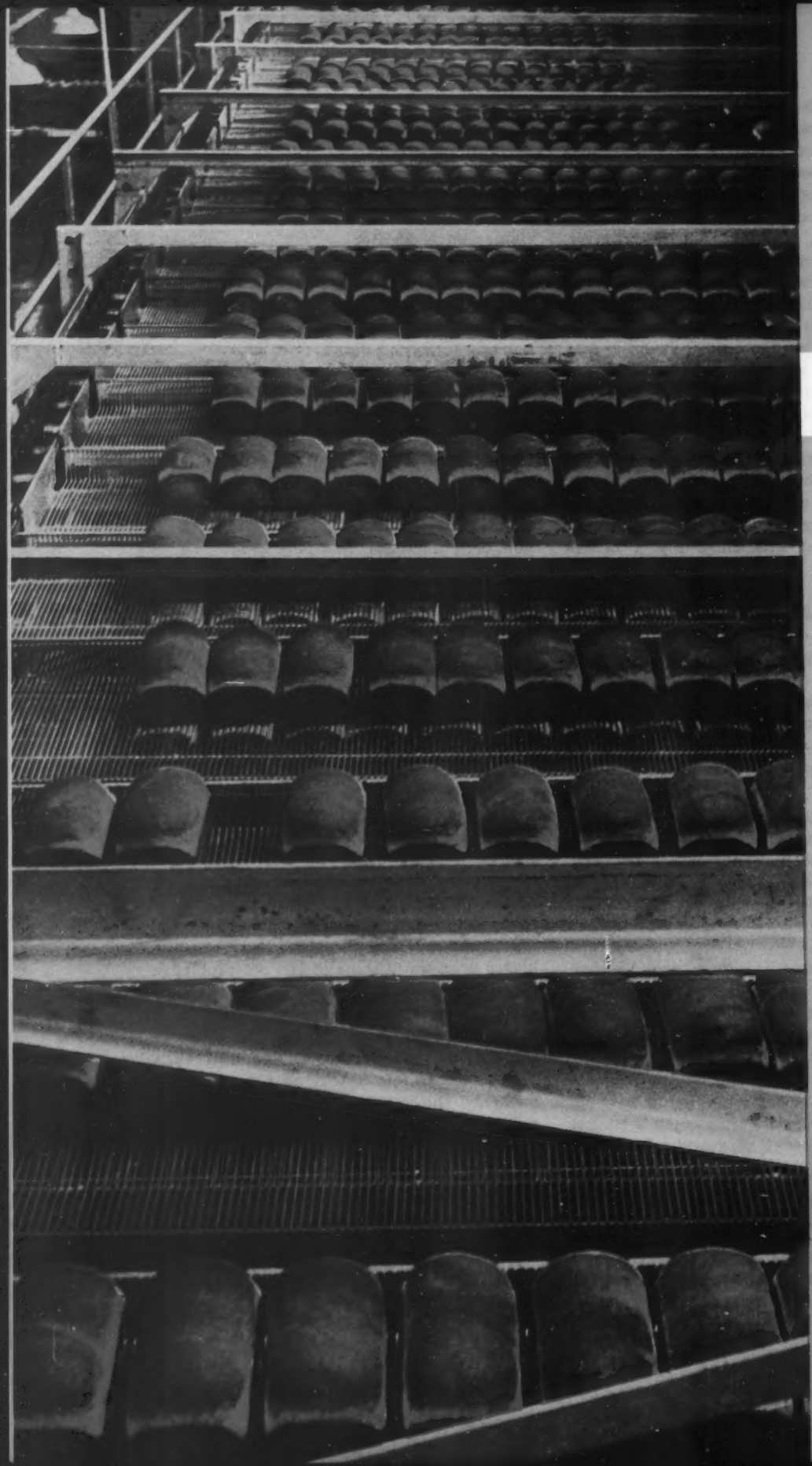
An anechoic chamber developed by mutual insurance engineers helps policyholders find ways to muffle excessive noise in their plants. A ground-vibration recording instrument known as an accelerograph tells contractors how much dynamite can be used safely on a job. Techniques have been perfected for analyzing air samples to detect toxic or radioactive substances. High-velocity fume and dust collectors have been installed in plants to protect workers from radiation. In one plant a ventilating system specially engineered to eliminate harmful lead fumes resulted in a 100 per cent increase in production, the inverse of a strike.

Cool, safe air for workers in high-temperature spots

In the American Mutual Insurance Alliance, safety and loss prevention engineers pool their talents under leadership of an engineering committee functioning in the National Association of Mutual Casualty Companies. These committeemen are selected representatives from the Alliance member companies, which together have 8,442 years of history and know-how in protecting the value of life and property. Through financial grants, meetings, handbooks, pamphlets and other means, the committee supports research, guides development of safety standards, advances the principles of safety engineering, keeps abreast of new developments and their potential hazards, and searches for better answers to some of the old problems.

Probably the most renowned proponent of safety and loss prevention engineering was Benjamin Franklin, the 1752 cofounder of our present-day system of mutual fire and casualty insurance. In his autobiography he even bequeathed the world an epitaph for strikes and work stoppages:

*"When men are employed, they are best contented; for on the days they worked they were good-natured and cheerful, and, with the consciousness of having done a good day's work, they spent the evening jollily; but on our idle days they were mutinous and quarrelsome."* ⊙



→

Tons of flour and other baking ingredients, soon to be mixed for breads, cakes and pastries, fill this bakery's large storeroom. Safeguards such as sprinkler systems, smoke- and heat-detectors protect baking plants from becoming "baked" in flames. Strict loss prevention must be practiced if bakeries are to be sound insurance risks.

←

Hundreds of loaves of bread, fresh from giant ovens, are cooling on a long conveyor belt which carries them to packaging machines. Within minutes after leaving ovens, bread is on its way to customers. Some 96 per cent of all bread eaten in the U. S. is made by 20,000 bakeries—turning out loaves at the rate of 40 million a day.

# THERE'S GOLD IN THIS GRAIN

*American Bakers Association*

*Bakery foods worth $5.5 billions are now consumed annually from nearly 20,000 plants.*

TAKE 16 BILLION POUNDS of flour. Add 350 million pounds of nonfat milk and 1.2 billion pounds of shortening. Mix well with 2.4 billion pounds of sugar and 300 million pounds of corn syrup and bake for the best-fed country in the world.

This giant recipe lists the ingredients which annually pass through our 20,000 bakeries, now producing more than $5.5 billion worth of taste-pleasing products.

Housewives of today (at least 96 per cent of them) have come to rely on these professional bakers for their pastries, cakes and bread.

For this release from toil, modern homemakers can thank the Swiss lake dwellers of the late Stone Age. The process of converting grain into bread dates back through them to some 8,000 years ago. Either by plan or accident the lake dwellers discovered that when moistened grains were heated they formed bread. It was, by today's standards, unbearably hard on the outside, soggy and dirty on the inside. But it was bread in its earliest form.

Commercial baking in this country got its modest start in 1640 in a tiny shop just a muffin's throw from Plymouth Rock. This was a one-man enterprise which served the sparse population of Pilgrims just 20 years after they landed in the New World.

Throughout our colonial period, however, bread-making was almost entirely a do-it-yourself project. Colonial women mixed and kneaded their dough, fired up their brick ovens and swept out the ashes before each baking. In those days, bakers' long-handled peels were common wedding gifts to young homemakers, "a symbol of domestic utility and plenty."

Not until the latter part of the 19th Century,

during the beginning of our industrialization, did the slow-starting baking industry undergo any marked change.

During this transition from a rural-farm to an urban-industrial society large baking plants came into being, and the professional bakers' output more than doubled. These bakeries, with their many employees and new mechanical aids, brought previously unknown problems to the industry. One of the biggest was employee safety.

Two advances made history in the industry about 1914. One was passage of the New York Workmen's Compensation Law, followed by formation of the Bakers Mutual Insurance Company of New York. Bakery employers established the mutual company to provide compensation insurance and to cope with the increase of industry accidents.

A publication issued that year by the New York Insurance Department stated: "Mutual associations of employers are perhaps in a better position to enforce rules for prevention of accidents than any other corporate body of insurers. The personal interest in reducing the number of accidents and the cost of compensation should manifest itself to a greater extent in such associations banded together for mutual protection than in any other form of corporate insurance."

#### Mutual Insurance Provides Many Coverages

Mutual insurance companies and associations have, for many years, provided protection to bakers, their employees and their plants. From small, one-man operations to the industry's many mammoth plants, insurance today is considered as vital to bakers as the crust on their bread. Well-planned insurance programs have in many instances proved to be the "staff of life" to burned-out bakeries which are suffering annual losses of more than $2 million.

Such protections as fire and extended coverage, business interruption, automobile and general liability, buildings and contents coverage, employee fidelity, dishonesty and mysterious disappearance, as well as workmen's compensation and employers' liability, are deemed necessary by the baking industry.

One of the busiest and most interesting of the industry's operations is Catherine Clark's Brownberry Ovens of Oconomowoc, Wisconsin; Burlingame and Anaheim, California. A mutual insurance policyholder, Brownberry Ovens started on $86 and has grown since 1946 to a $4 million a year enterprise.

Its founder and president, Mrs. Catherine Clark, decided 15 years ago that she was through buying bread which "tasted like cotton batting." She started to bake her own, using then, as her bakery uses now, the finest ingredients available. It wasn't long before she ventured from her kitchen into the business world. Starting with one helper in a small Oconomowoc shop, Mrs. Clark sold her savory products from door to door. Soon her bread became the rage of the Milwaukee area.

#### Safety and Loss Prevention Are Stressed

Today Brownberry Ovens has an ever-expanding $400,000 plant and offices employing more than 200 persons in the quiet little Wisconsin community and in the two branches situated in California. Brownberry still isn't big when compared with the baking industry's "top ten," which together account for more than $2 billion of the industry's total sales, but its growth rate has been phenomenal. Each year for the past six years, a building expansion program has been necessary—and along with it an expanded insurance program. Brownberry Ovens is in the enviable position today of not being able to meet its demand.

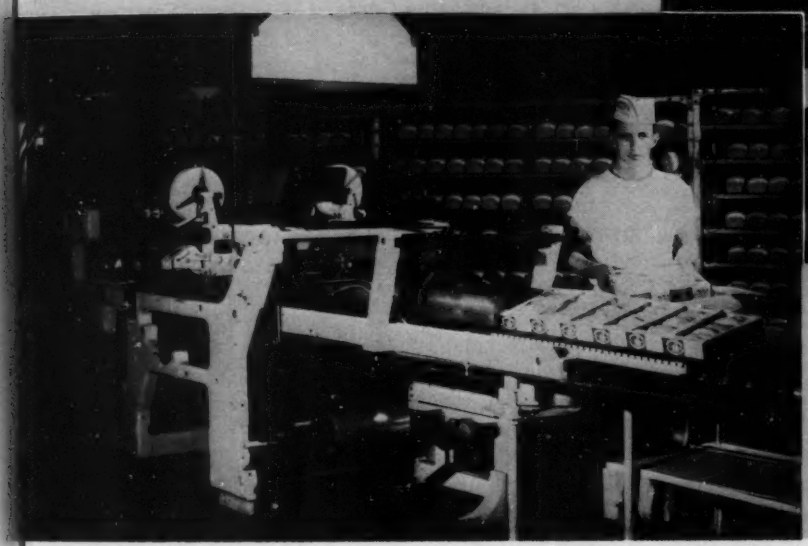
Two demands it has been meeting, though, are safety and cleanliness. Oconomowoc Production Manager Vern Bruss told the JOURNAL that Brownberry is now in the process of developing a new safety program. He explained: "In the course of our workday, hazards can be easily overlooked. We're now starting to set aside a few minutes each day to tour the plant, looking specifically for safety hazards and then seeing that they're corrected."

The plant also is kept spotless. In addition to daily scrubbings, the bakery is scoured from floor to ceiling each week. Cleanliness, Bruss pointed out, goes hand in hand with safety.

Brownberry Ovens is one of the many thousands of bakeries supplying tables across the country with breads and other lines of baked goods. The traditional white loaf, just as it was in colonial days, is still the most popular seller. But today there are more than 70 varieties from which to choose. There's pumpernickel, a number of ryes, Italian ring bread, Jewish hallah, Swedish knäckebröd, Irish oatmeal bread and

Jon Mille Photos

Quiet, tree-shaded entrance to the colonial-styled plant of Brownberry Ovens, Inc., Oconomowoc, Wisconsin, belies its busy interior where the baking art continues day and night.



Employees of Brownberry Ovens, protected at their work by a mutual insurer, turn out a batch of French croissants, one of the most popular of bakery's specialties.

Automation is one reason why the baking industry has been able to meet the growing demands for its products. High-speed packaging machine is just one new timesaver.

many other specialties pouring out of the big ovens at a rate of more than 40 million loaves a day.

All of this, plus the daily production of pies, cakes, sweet rolls and doughnuts, makes up the bulk of this multibillion dollar industry which is now in its peak season with the Thanksgiving and Christmas holidays fast approaching.

The major reason bakeries can handle their ever-increasing demand is the modern baking machinery found in nearly all of the plants. There are automatic conveyor systems rushing the products from the ovens to cooling racks and then on to slicing and wrapping machines; there are huge dough dividers and high-speed ovens which can bake their fill of bread in as little as seven minutes.

But despite these many technical innovations which have so vastly changed the baking industry, all bakers have one common goal paramount for centuries. That is, to bake bread like mother used to make. That's no easy task. ⊙

# TEST-TUBE DRIVING

*Simulators show up clues in drivers, cars and roads that could save lives.*

ONE OF THE SOUNDS of progress in traffic safety these days is an ear-tingling volley of wrathful language.

Its source is a group of volunteers being put through driving tests at the University of California in Los Angeles. What arouses their ire are motorists who get in their way. This natural reaction is noteworthy only because the car they are "driving" is mounted inside a building, and the offending motorists are merely images projected on screens.

These test-tube drivers are part of a whole new field of traffic research based on the use of driving simulators. UCLA has the most advanced model in actual use, but researchers there and at Cornell University have designed far more complex auto simulators comparable to the computer-operated devices used in training pilots and astronauts.

One such simulator, designed by Cornell on a grant by Liberty Mutual Insurance Company, would be adaptable to several research and training tasks at modest cost—perhaps $100,000. More comprehensive facilities would cost considerably more. UCLA estimates it would take about $500,000 to turn its relatively crude prototype into a flexible, high-fidelity research simulator. An even more sophisticated version proposed by the U. S. Public Health Service would cost an estimated $3.5 million to build.

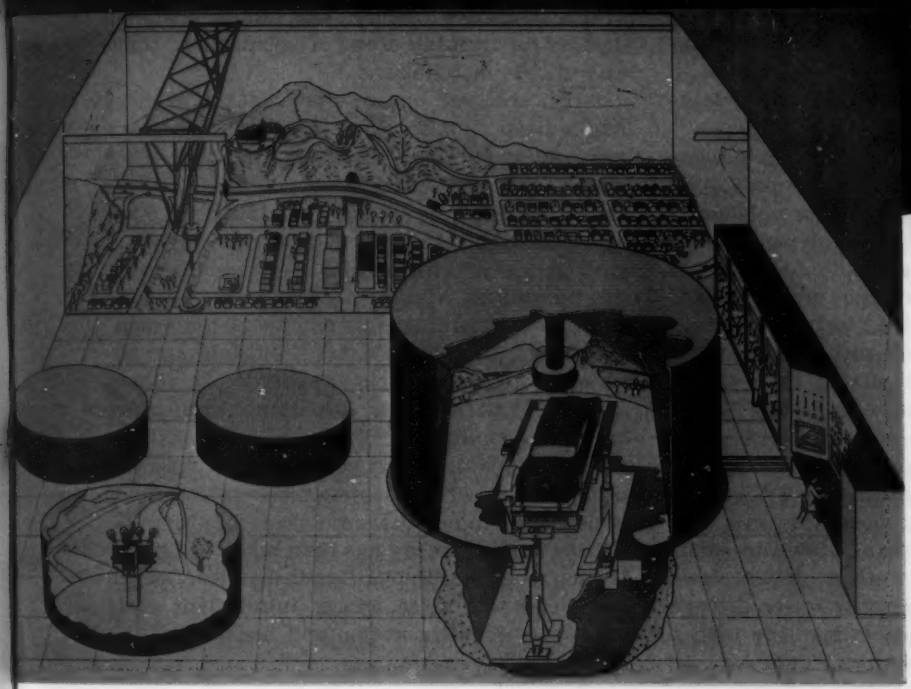
But why are such elaborate facilities needed, when there are 75 million automobiles on the roads that can be observed in action? The answer goes to the heart of the traffic safety problem. Despite our 65 years of hazardous coexistence with the automobile, nobody really knows how to identify and measure the precise causes of auto accidents. Each year some 38,000 motorists are killed and 1.5 million are injured on U. S. highways, yet there is no satisfactory way of determining, out of all the complex circumstances, which influences were decisive.

Simulation can help provide the answers, the experts say, by enabling researchers to study the driver and his environment under controlled laboratory conditions. Any number of persons can be confronted with exactly the same set of circumstances, or the same person can be tested in an endless variety of ways. Another obvious advantage is that researchers can simulate hazardous situations too risky to stage on a real highway.

Three principal groups are interested in driving simulation, each for different reasons. Highway engineers want to know in advance which road designs will move the most traffic with the least likelihood of an accident. Auto manufacturers would like to find out how to improve the performance and safety of their cars. And a large number of persons—licensing authorities, doctors, law enforcement officials, driver education teachers and others—want precise data on the influence on drivers of drugs, alcohol, fatigue, emotional stress, disease, physical disabilities and personality disorders.

"The farther we progress here with driving simulation, the more we become convinced that it holds tremendous potential for getting at the highway safety problem," says J. H. Mathewson, assistant director of UCLA's Institute of Transportation and Traffic Engineering.

UCLA's simulator, developed over the past five years, consists of an automobile rigged to perform as if it were being driven down a high-



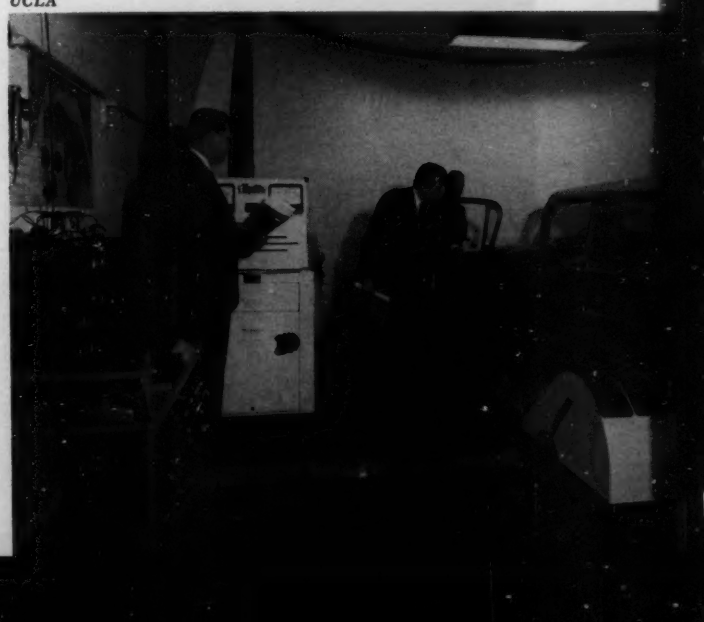
*California Division of Highways*

Driving simulator at UCLA makes use of an automobile, mounted on rollers, and films taken from a moving vehicle. Second screen is at the rear.

More advanced simulator would completely surround test car with a TV screen and allow "live" situations to be enacted on landscape at rear.

Delegates at a National Conference on Driving Simulation tried out the UCLA simulator earlier this year, decided it can help reduce accidents.

*UCLA*



way, even though it actually is located in a 20-by-30-foot room. Its rear wheels revolve on the steel rollers of a chassis dynamometer which exerts the proper amount of pull on the motor and produces simulated road noises and vibrations. The front wheels rest on turntables that have been spring-loaded to give the steering wheel the same "feel" as if the car were in motion.

Test drivers operate the car in response to sound-color movies filmed from a moving auto-

mobile, showing the road as seen through both the windshield and rear window. These are projected on wide-angle screens to the front and rear of the test car. The front projector is hooked to the steering system so the picture moves sideways as the driver turns the steering wheel. Thus the driver can steer around other vehicles or appear to run right off the road.

The result is startlingly realistic, according to volunteers recruited from among the faculty, student body and outpatients at the UCLA Medical Center. Driver responses, including changes in speed, steering and braking movements, and the driver's galvanic skin response, also indicate that test subjects become absorbed in the illusion and drive as if their lives depended on it. Some have even suffered mild shock in simulated emergencies.

Nevertheless, engineers who built the simulator consider it a relatively crude prototype. Their ultimate goal is a much more elaborate device capable of responding to the test driver's actions just as other motorists do on an actual highway. Instead of unrolling predetermined situations on the screen, they want to create a "live" driving environment with the aid of a miniature landscape manipulated by a skilled operator or by electronic computers. Traffic scenes would be projected by live television onto screens completely surrounding the test car.

Next step will be to mount the car, TV screens, projector and dynamometer assembly on a tilting platform that can be manipulated to simulate the forces of acceleration, deceleration, turning and skidding in response to the driver's actions. UCLA already is experimenting with a tilting chair device that demonstrates the workability of such a system.

While driving simulators are still in the development stage, simulation techniques have long been used on auto proving grounds and in crash-injury studies utilizing dummies instead of humans to measure impact forces on the body. Driver education teachers also make use of simple simulators, and driver licensing authorities use simulated brake pedals to test applicants' reaction times.

However, the real breakthrough in developing simulators came with World War II and the advent of incredibly fast analog computers. The military services created such elaborate simulators as the famous Link Trainer for pilots, the Waller Gunnery Trainer and other ingenious devices for training crews of submarines, tanks and missile installations.

When the war ended, the aviation industry had a head start in simulation techniques and has come to rely on them more and more for both design and training purposes. United Air Lines, for example, began retraining its pilots on DC-8 flight simulators 12 months before it put the new jet airliner into commercial service.

A number of aviation engineers were on hand last March when highway engineers, auto manufacturers, health and safety officials and insurance representatives gathered in Santa Monica, California, for a national conference on driving simulation. The consensus was that the technique has great potential for improving traffic safety. The pressing need is for funds to develop and operate simulation facilities.

A beginning already has been made by Liberty Mutual, the U. S. Public Health Service, Cornell and UCLA. If these efforts fulfill their early promise, the entire nation will benefit. ⊙

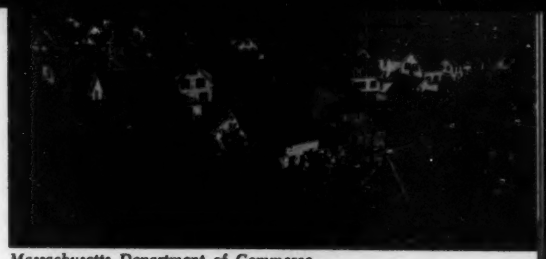
*Business Screen Magazine*

U. S. astronauts trained for space flights in this Alpha Trainer, which simulates sights, sounds and movements of Project Mercury capsules. Color films showing earth as it would appear to them were projected on the small screen above their faces.

FROM OUR ANNALS

# THANKSGIVING PRELUDE

## *November, 1620*



*Massachusetts Department of Commerce*

Provincetown harbor today, the "Cape Harbor" of Mayflower anchorage, November 11, 1620, and haven for the first landing of Pilgrims.

BUT FOR A CACHE of insurance staked out by provident Indians, the Pilgrims might have perished or been even more decimated before that first Thanksgiving 340 years ago.

Corn stored by the Indians among the Cape Cod dunes near Truro in the Provincetown area was found and relished by the famished Pilgrims foraging under the direction of their appointed military leader, Miles Standish. The spot became known as Corn Hill and is so marked today with a tablet bearing the inscription:

1620 1920

SIXTEEN PILGRIMS
LED BY
MYLES STANDISH WILLIAM BRADFORD
STEPHEN HOPKINS AND EDWARD TILLEY
FOUND THE PRECIOUS INDIAN CORN
ON THIS SPOT WHICH THEY CALLED

CORN HILL

NOVEMBER 16, 1620
OLD STYLE
AND SURE IT WAS GOOD PROVIDENCE
THAT WE FOUND THIS CORN FOR ELSE WE
KNOW NOT HOW WE SHOULD HAVE DONE
MOURT'S RELATION

PROVINCETOWN TERCENTENARY
COMMISSION

Nearby, in what is now Provincetown, Massachusetts, the Pilgrims had made their first landing on American soil November 11, 1620. There, too, they suffered the first cruelties of the new and strange land. While the Mayflower remained anchored offshore, Standish and his men scouted the Cape Cod coast for five weeks seeking the most favorable site for the new settlement. The subsequent landing at Plymouth was made December 26.

Amid the suffering and uncertainty of those first days and weeks, the cache of food in Corn Hill must, indeed, have been manna from heaven to the Pilgrims. Later in his account, *Of Plymouth Plantation,* Governor William Bradford, who had succeeded the deceased John Carver, described the Cape as a "hideous and desolate wilderness, full of wild beasts and men."

Truro itself was settled about 1700 and was established as a town in 1709. Fishing and whaling became principal sources of income. Had mutual property and casualty insurance been in vogue then as it is now, Truro might have surpassed the peak it reached in 1850. At that time it had a fleet of more than 100 vessels. However, marine disasters, with property losses and business failures, doomed the fishing and whaling industry.

Now a colony of artists and writers, and with a population of about 850, Truro is mainly dependent upon summer tourists. A boon to the economy of the town has been a recreation area built by the state in the vicinity of Pilgrim Lake, once known as East Harbor.

Provincetown likewise was settled about 1700 but was not incorporated as a town until 1727. While the Pilgrims made the town forever famous, many explorers and fishermen are believed to have visited its shores long before the Mayflower arrived. In time deep-water whaling became the first principal occupation, and with rapid growth of the fleet, Provincetown became one of the leaders in the whaling industry.

Some of the old fishing industry remains, but Provincetown today is primarily a summer theater and resort town. In its day the Provincetown Playhouse had an aura of prestige surpassing that of any theatre in America and is historically noted for having introduced the early plays of Eugene O'Neill, America's first major dramatist. In 1960 the town had a population of 3,389 and an assessed valuation of $10.6 million.

Pre-eminent on the scene and now cofamous with Plymouth Rock is Pilgrim Memorial Monument, a great granite tower 250 feet high erected in 1910. It commemorates the first landing of the Pilgrims and the adoption of the *Mayflower Compact,* "first charter of a democratic government," which members of the new colony signed before they stepped ashore at the site of Provincetown. ⊙

# $ DOLLARS OF HOPE AND HELP

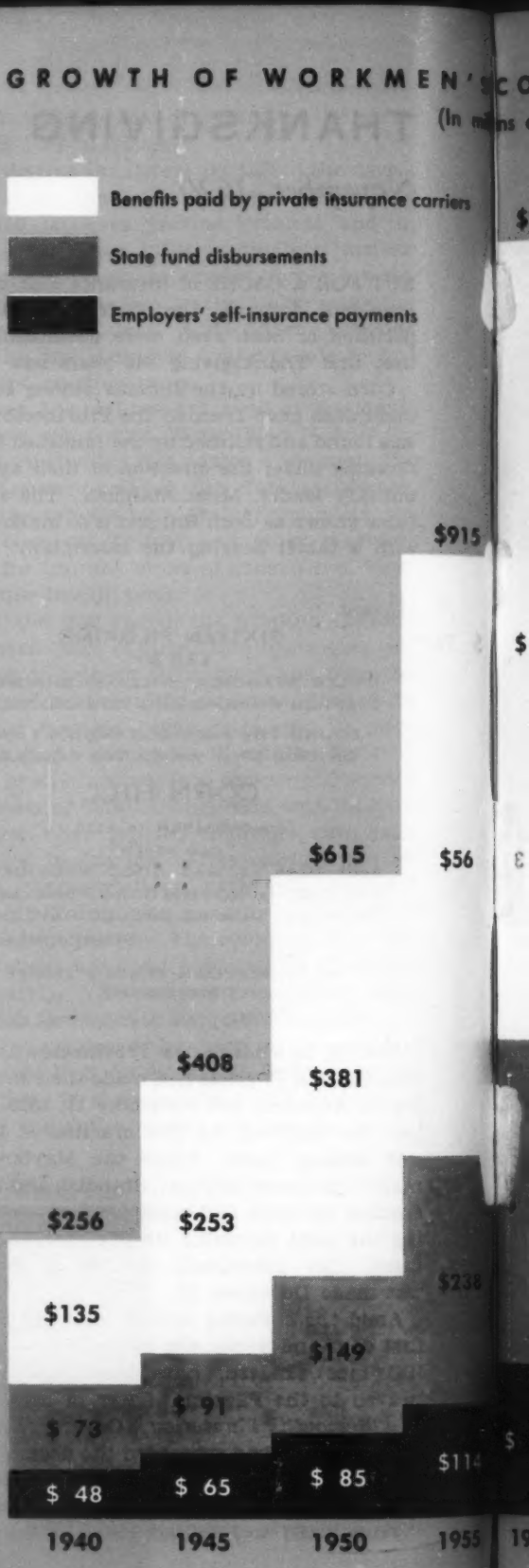
*Now at $1.4 billion annually, workmen's compensation benefits have made industrial history.*

MILLIONS OF LETTERS this fall bear stamps commemorating the 50th anniversary of America's state system of workmen's compensation. An abstract design on the four-cent stamp fittingly symbolizes justice, the aim of workmen's compensation laws now effective in every state, Puerto Rico and the District of Columbia.

Magnitude of that justice is now measured not only by the $1.4 billion of benefits paid out annually by insurance companies and others to injured workers and their dependents. It is measured, too, by the host of those once-injured workers who have been rehabilitated, retrained and re-employed in programs developed by mutual casualty insurers and others as an integral part of the state workmen's compensation system. Mutual insurance has been in the forefront of this "rehabilitation revolution" throughout the 50-year history of the workmen's compensation system. Through partnership and leadership in restoring disabled persons to active lives, mutual insurance has brought new hope and opportunities to more than a million industrial accident victims.

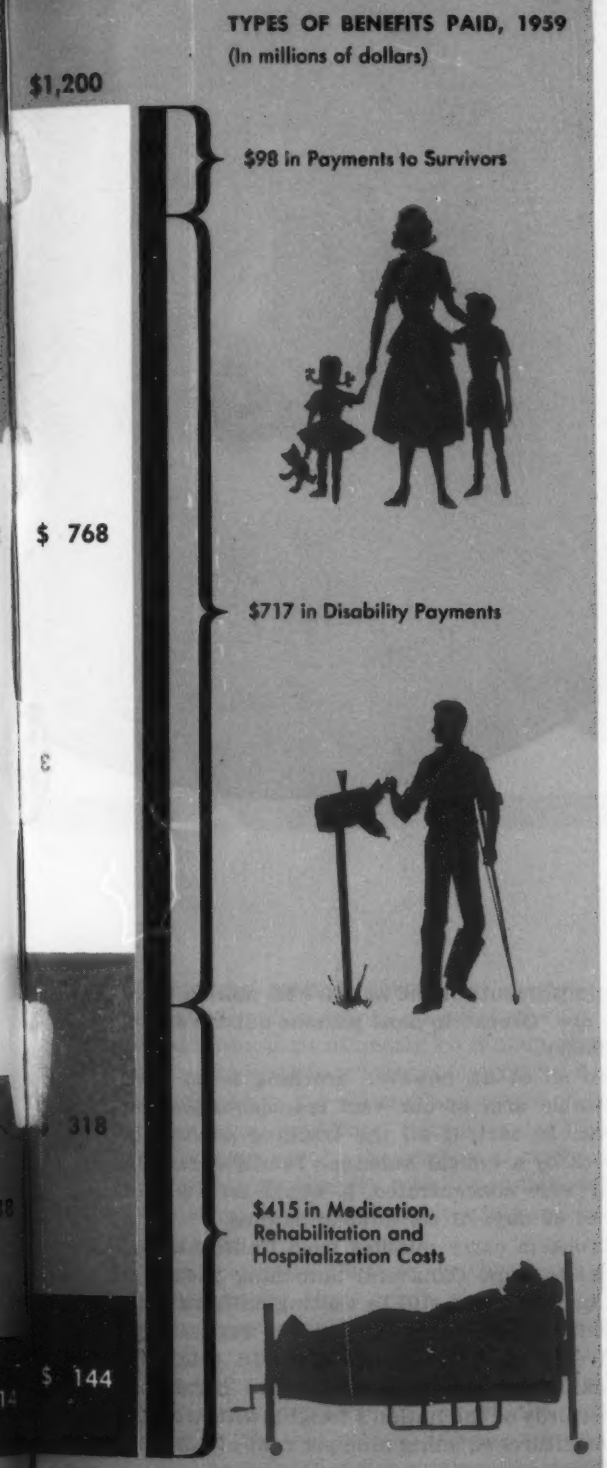
Statutory workmen's compensation now protects some 43 million wage earners, more than 80 per cent of the nation's employees. Workers covered under these acts have nearly doubled since 1940 when only 24 million wage earners were protected.

With the increase of workers covered, there



COMPENSATION BENEFITS

ns of dollars)

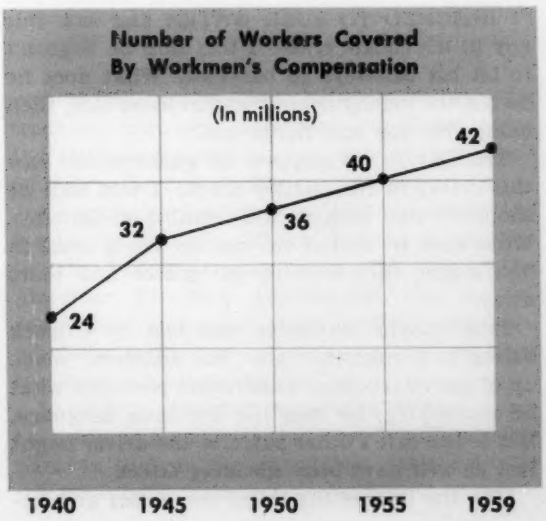



Source: U.S. Department of Health, Education and Welfare

has been an even sharper climb in the amount of benefits paid, both in disability payments and medical costs. Under the spur of inflation and broadened coverage, benefits reached $1 billion in 1956 and will approach $1.5 billion this year. Total benefits this year will be nearly six times the $256 million paid out by all compensation carriers in 1940.

Compensation costs have been held down by a continuing decrease in the rates of deaths and disabling injuries among workers. Deaths resulting from work accidents dropped 11 per cent during the decade of the 1950s, an achievement credited to industrial safety practices and the loss prevention services of workmen's compensation carriers.

Private insurance carriers, who have undergirded our compensation system throughout its history, now write more than 62 per cent of workmen's compensation coverage and pay out more than $800 million annually in benefits. Additional coverage is provided by state funds (26 per cent) and self-insurers (12 per cent). Most self-insurers nevertheless carry excess insurance with private carriers to protect themselves against major compensation claims. Among all carriers, mutual casualty companies are the fastest-growing source of compensation coverage. Mutual companies recorded an increase of 166 per cent in premiums from 1950-59 and now write a third of private-carrier compensation insurance. ⊙



*Trucks now transport two-thirds of the nation's freight— missiles and monkeys included.*

# BIG WHEELS OF OUR ROADWAYS

"I BEACHED TO PUSH WATER and saw this guy in his cackle crate. I told him he oughtn't to let his baloneys go barefoot. What does he do but tell me my peanut wagon looks sick, then bumps his pin and lights out."

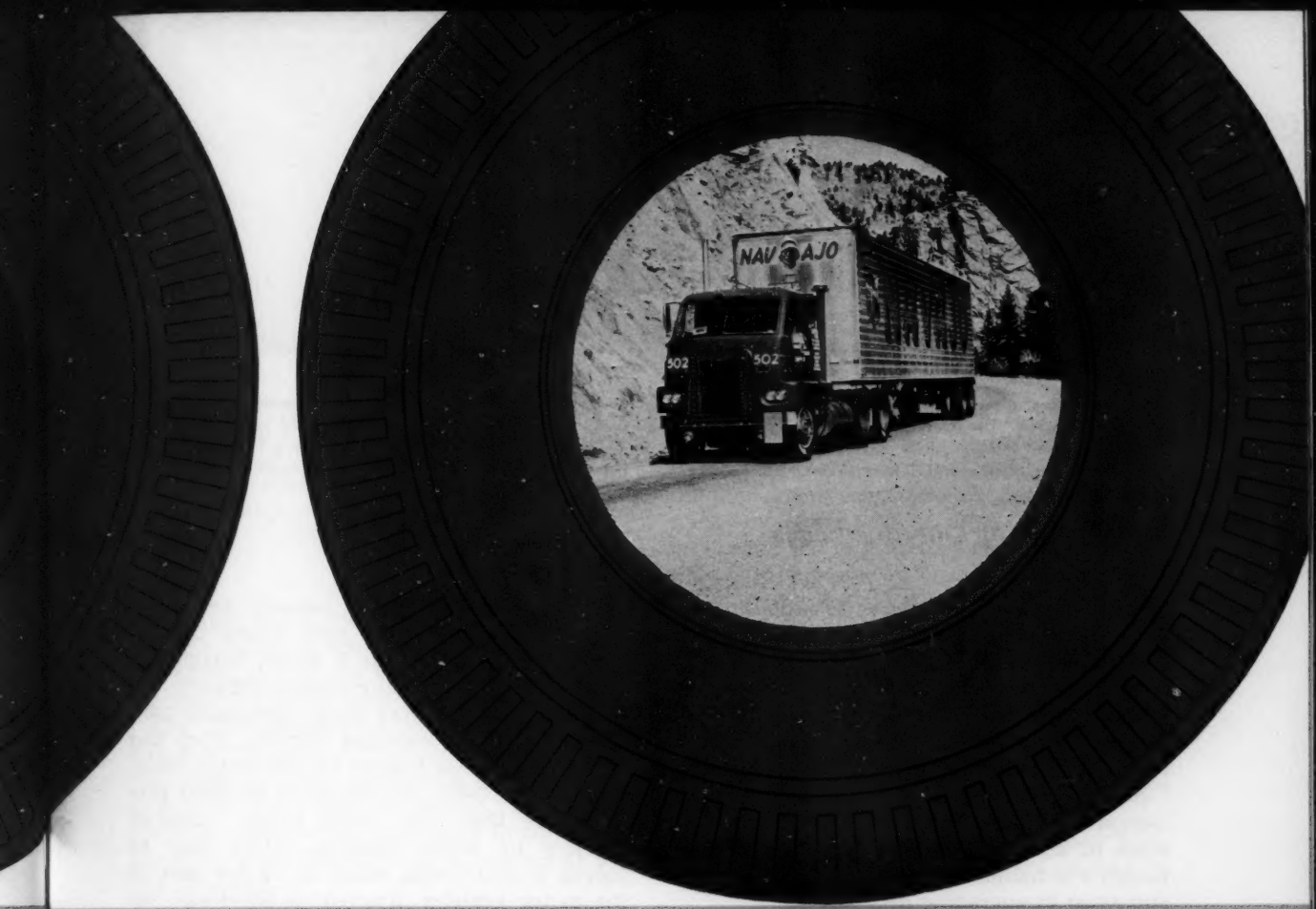
Translation: "I stopped for gasoline and saw this driver in his poultry truck. I told him he shouldn't ride without snow chains on his tires. What does he do but tell me my truck looks in bad shape, then revs up his motor and roars away."

This colorful narrative was told by a truck driver in a roadside cafe. His audience, made up of fellow truckers, understood perfectly what he was saying, for they use the same language. But to the cafe's other patrons, the driver might just as well have been speaking Greek.

Like the interesting lingo, the duties and accomplishments of the nation's 6.5 million truckers are "Greek" to most persons outside the big industry.

To all of us, however, trucking is an indispensable arm of our vast transportation network. In fact, if all the trucking services received by a typical American family during the year were concentrated, it would take a truck about 80 days of continuous hauling.

Truckers carry missiles from California factories to Cape Canaveral launching pads. Our astronauts might still be waiting on terra firma if it hadn't been for the "peanut wagons" that delivered their space vehicles. In total, the trucking industry last year moved more than two-thirds of the nation's freight, with trucking expenditures equaling nine per cent of our gross national product.




*International Harvester*

**Night and day big rigs like these are rolling over our nation's highways hauling millions of tons of goods. Last year they carried more than 225 billion ton-miles of freight and provided direct employment for some 7.5 million persons. Despite the growing competition from other types of carriers, future of trucking is bright.**

The many-faceted operations involved in keeping 12 million trucks on our highways are the daily functions of nearly 7.5 million persons directly employed in trucking. Many large fleets, concentrated in the big trucking states of California, Texas, New York, Pennsylvania, Illinois and Michigan, require the services of mechanics, accountants, dispatchers, freight handlers, salesmen, insurance managers, fleet safety specialists and drivers.

Their composite job is to see that truck cargoes are moved from origin to destination as quickly, economically and safely as possible. And that job has been getting progressively bigger and more complicated. The industry is abreast of agriculture as one of the largest employers in the nation. Gross revenue of federally-regulated motor carriers has gone well over $7 billion. To keep their rigs rolling, the trucking industry each year purchases some 14.5 billion gallons of gas and spends some $4 billion for new equipment and parts.

A protective copartner in this growth is the insurance industry. Mutual insurance associations and their member companies assisted the American Trucking Associations, Inc., in developing an insurance guide for fleet operators, providing maximum coverage at a cost enabling truckers to remain competitive.

In making recommendations to its fleet members, the ATA suggests that they list all possible hazards they might encounter, then consider the insurance coverages available.

*Gateway Transportation Company*

Stopping for fuel gives truckers a chance to take a short break. The Interstate Commerce Commission ruled that long-haul drivers rest at least 8 hours after every 10-hour stretch.

One reason why the trucking industry boasts such an excellent highway safety record is the work of thousands of mechanics who put the giant vehicles in top shape for drivers.

## *Big Wheels of Our Roadways*

First they are well advised to protect themselves against loss of their business by some unexpected incident. Then, suggests the ATA, attention should be focused on insurance service as an aid in developing a safety program and in investigating and adjusting claims which cannot be handled by motor-carrier personnel.

Before specific coverages are considered, the association advises, careful selection should be made of an insurance company that has the facilities to handle claims, investigate accidents and assist in upgrading fleet safety.

For a large fleet operator, those services may involve several thousand trucks, hundreds of truck tractors and trailers and many autos. Forms of insurance needed by all truck fleets, whether large or small, are public liability (automobile and general), cargo liability, workmen's compensation, coverages protecting against physical damages to trucks and other equipment, fire and extended coverage on offices, garages and terminals.

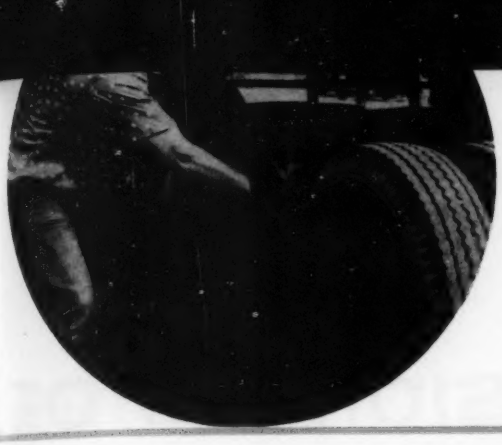
Other policies to be considered by truckers are protection against vandalism and malicious mischief, burglary and robbery, forgery, earthquakes, tornadoes, and coverages which depend on fleet size, location and types of cargoes hauled.

Some carriers, whenever possible, purchase package policies. Accidents have occurred involving a trucker's death, loss of his cargo and injury or death to another party. A package policy with a combined single limit of liability on an occurrence basis can eliminate the necessity of dealing with more than one insurer.

Aside from protecting the trucking industry by writing property and casualty coverages, mutual companies have been active in promoting truck safety. As a result, trucking is perhaps our most safety-conscious industry.

More than 2,000 truck fleets, comprising 200,000 vehicles, were surveyed recently. They had an accident rate of 1.38 per 100,000 vehicle miles. In the early 1930s, the industry's accident rate was more than four times higher. Another measure by which trucking safety may be judged is that trucks make up 12 per cent of the motor vehicles involved in accidents, yet they comprise 16 per cent of the nation's vehicle total.

*American Trucking Associations, Inc.*



*American Trucking Associations, Inc.*

Trucker on run between Tucson, Arizona, and El Paso, Texas, stops to make check of tires, air brakes and trailer connections. Frequent inspections of equipment are made by drivers.

This still leaves room for improvement, and truckers, with the help of insurance companies and safety groups, are working hard at bettering their industry's accident record.

The fleet industry is no longer the bare-knuckled, hard-driving fraternity it was in the '30s. Instead, a new generation of professional drivers has come into the picture. These men, like their predecessors, take pride in transporting goods as quickly as possible, but not at the cost of safety.

Such professionalism is being encouraged by all groups concerned with the industry. An example is the National Truck Roadeo, an annual contest sponsored by the American Trucking Associations. Established in 1937 to encourage exemplary safety records by giving national recognition to the best drivers, the Roadeo has achieved nationwide success.

In a series of stiff competitive tests, the Roadeo determines contestants' knowledge of safety, courtesy, first aid, fire fighting and skill in handling trucks of various sizes and shapes. The National Association of Automotive Mutual Insurance Companies sponsors the Roadeo's national team champion trophy, and Liberty Mutual Insurance Company each year presents the grand trophy in the tank-truck class.

By the time the state champions reach the national contest, held earlier this year in Detroit's Cobo Hall, thousands of truckers from coast to coast have competed with each other in state and local contests. A safety engineer remarked: "This is where the Roadeo has its greatest effect. Competition within companies and then among companies within states arouses much interest. Drivers often discover that they're not the experts they thought they were and try to improve."

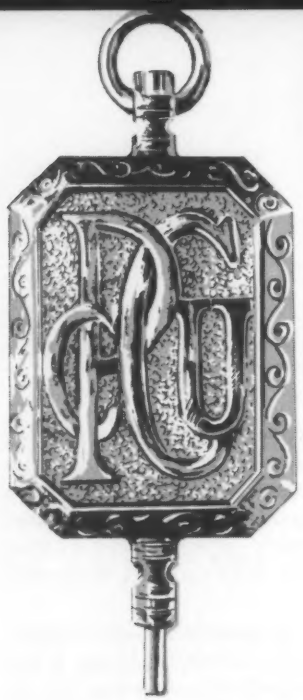
Within the entire transportation field, competition is even greater. Truck fleets are a key segment in the transportation sphere, but by no means the only one. Air transport is gaining in popularity through its unparalleled speed. Shipping on the St. Lawrence Seaway has taken some of the truckers' business away, and rivalry between railroads and motor fleets has always been vigorous.

Trucking, however, remains as the most flexible transportation, reaching areas remote to other carriers.

Thus, both for the public welfare and national security, the U. S. is assured a co-ordinated transportation system which utilizes all forms of conveying cargoes—including "peanut wagons" and "cackle crates." ⊙

Long after office buildings and stores have closed for the day, truck terminals rumble with activity. Some two-thirds of the nation's freight is moved by truckers, much of it during the evening hours when other traffic has slackened.

Competing driver eases rig through an aisle of tennis balls which allows two inches to spare on each side of wheels. Each year the country's best truckers compete in National Truck Roadeo for awards made by mutual insurance companies.



# PROFESSIONALS OF

*Wearers of CPCU keys have mastered the intricacies of property-casualty insurance underwriting.*

HURRICANES, FIRES, FALLS and other misfortunes of modern man have become a maze of more than $6 billion a year in losses paid out by 3,194 property-casualty insurance companies to reduce or offset the risks of individuals and business.

Fathoming all that goes on in that vast complex is the goal of 3,000 worker-students in the property-casualty insurance industry who are seeking designations as Chartered Property Casualty Underwriters. Some of them are doing it in night classes, others in small study groups and still others in self-study.

Dr. Edwin S. Overman, CPCU, was named this year to succeed Dr. Harry J. Loman as dean of American Institute for Property and Liability Underwriters, Inc., with Bryn Mawr, Pennsylvania, offices.

By next spring about 300 of the candidates will complete three years of study, pass the last of five rigorous examinations and join 3,100 who already hold CPCU certificates.

Organized study for national CPCU exams, expected to double by 1970, began in 1942 under the aegis of the American Institute for Property and Liability Underwriters, Inc. Initiated by Dr. S. S. Huebner and the American Association of University Teachers of Insurance, the American Institute was founded and underwritten by insurance industry groups including the American Mutual Insurance Alliance and the National Association of Mutual Insurance Agents.

Founders of the Institute conceived of a broad educational and research program to advance the professional stature of property-casualty insurance employees. Its work has paralleled activities of the College of Life Underwriters which has fulfilled a similar role for the life insurance industry since 1927. The CPCU program and other activities of the American Institute extend the elementary insurance education program started in 1908 by the Insurance Institute of America. Today all three agencies for insurance education operate from Huebner Hall, the American Center for Insurance Education, a half-million-dollar edifice opened this year in Bryn Mawr, Pennsylvania.

In its statement of purpose, the Institute prophetically provided for a dynamic role for insurance education, "to prepare men and women engaged in the property and casualty insurance business to understand the changing economic, social and governmental background in which the insurance institution operates, its relationship to other institutions in this background as well as the constructive and stabilizing services which it renders to civilization."

The Institute organized and regularly revises a set of study materials and five college-level examinations. Parts of the CPCU exam series

# OF PROTECTION

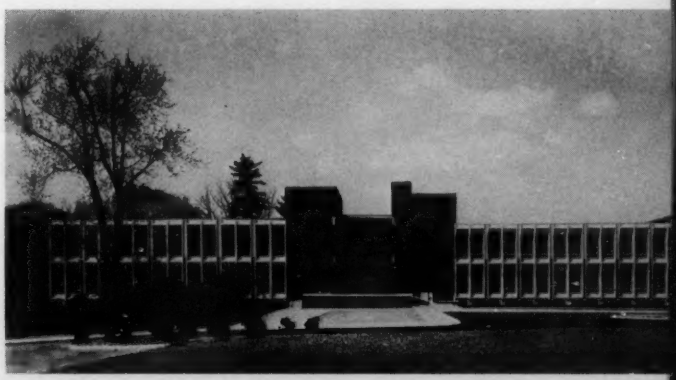
cover insurance principles and practices; functional aspects of insurance, including marketing; economics; government and business insurance and business law; and management, accounting and finance. CPCU study is open to any adult of good moral character who holds a high school diploma and is employed in the property-casualty insurance business. Before a CPCU certificate and key may be awarded, however, the candidate must have three years of satisfactory experience in the insurance field.

Under the leadership of Dr. Huebner, as chairman, and Dr. Harry J. Loman, as dean, the program grew from 100 candidates and 6 designees in 1943 to 2,790 candidates and 306 CPCUs this year. This year Dr. Huebner was elected chairman emeritus of the American Institute. His place as chairman was taken by H. W. Yount, executive vice president of Liberty Mutual Insurance Company, Boston, and president of the American Mutual Insurance Alliance.

Yount's chairmanship of the American Institute is indicative of the interest mutual property and casualty insurance companies have in the CPCU study program. Mutual companies encourage their employees to seek CPCU designation by paying all or part of their expenses for tuition, books and fees for examinations, diplomas and registration. Mutual companies with large home office and branch staffs often organize CPCU study groups, especially in areas where no college CPCU classes are offered.

In return for the encouragement given CPCU candidates, companies get employees who have training applicable to all areas of company operations. One large mutual company with 45 CPCUs employs them in departments ranging from underwriting (with 22 designees) to sales (with 11) and computer, legal, loss prevention and administrative sections. A high proportion of designees, about one fourth in the case of one company, hold executive positions. As one personnel manager put it, "When we see that a man is interested enough to study on his own time, we keep our eyes on him. He most likely is the kind of man we want to promote."

Dr. Edwin S. Overman, new dean of the American Institute, tells of an aspirant who sought candidate status to learn about insurance contracts and loss adjustment procedures in order to win excessive claims from insurance companies. Such candidates are not accepted in the CPCU program. Those who are accepted are pledged to promote professional ethics as well as professional techniques. This spirit is reflected in the charge taken by all who win CPCU honors: "In all of my business dealings and activities I agree to abide by the following rules of professional conduct: I shall strive at all times to ascertain and understand the needs of those whom I serve and act as if their interests were my own; and I shall do all in my power to maintain and uphold a standard of honor and integrity that will reflect credit on the business in which I am engaged." ⊙



Huebner Hall, the American Center for Insurance Education, was dedicated in June. A $500,000 monument to the advancement of insurance professionalism, it houses five agencies.

# BLACKOUT ON JOBS

Wide World

*Forced unemployment is a ghostly tragedy of the nation's destructive industrial fires.*

AFTER A COFFEE BREAK the evening shifts returned to work at the Moore Business Forms, Inc., printing and typesetting plant in Kahoka, Missouri. An operator switched on the blower system of his carbon-coating machine. As the fans started, dust ignited from the switch spark and fire spread rapidly over paper dust and shredded paper in the unsprinklered building. Sisal paper on the roof insulation ignited and spread the flames until the entire structure caved in.

Although the fire department used up 175,000 gallons of public water and hauled more from a quarry pit, the plant suffered a $1 million property loss and another $1 million loss of business. Both of these losses were insured—but there was another kind of loss that doesn't show in the statistics. About 85 of the plant's 100 employees lost their jobs permanently when the plant was rebuilt in another state, and the community lost one of its major sources of tax revenue.

Worker at General American Transportation Corporation watches 1,200 jobs go up in smoke at Masury, Ohio. Fire started in a paint spraying booth, spread unhampered through the railroad tank car assembly plant.

*National Fire Protection Association*

With more than 6 million workers unemployed, the destruction of jobs by such fires is doubly unfortunate and costly. While it is difficult to estimate the total number of workers affected, the National Fire Protection Association notes that there were more than 40,000 fires in industrial occupancies alone last year. If half of these burned-out firms laid off an average of 25 workers each during the time their facilities were being repaired or replaced, half a million workers lost worktime because their jobs were destroyed by fire in 1960.

While some burned-out firms are able to find other quarters quickly or repair the damaged premises, many are out of operation for a year or more. Some fail to rebuild at all, move away, or transfer their operations to other plants. In North Portland, Oregon, for example, Beall Pipe & Tank Corporation shifted its work to the firm's plants in other states when fire destroyed its million-dollar complex of assembly buildings last June. The plant had employed 200 workers.

Industrial fires strike a particularly hard blow at communities already suffering chronic unemployment. Such was the case in Minnesota's

*National Fire Protection Association*

## *Blackout on Jobs*

Iron Range area, already distressed by lack of jobs for 13 per cent of its work force, when fire destroyed a large building-board plant. In addition to the hardship on the firm's own employees, the loss of the plant had a serious effect on the incomes of many pulpwood growers in the area.

Equally vulnerable are communities dependent on a single employer for their financial support. In New Sharon, Maine, 70 per cent of the town's payroll and its largest source of taxes went up in smoke when the Medomak Canning Company plant burned last year. It had provided jobs for 85 to 200 of New Sharon's 707 residents.

The economic effect of such fires extends beyond employees and their families to local merchants, suppliers, schools and public services. Merchants formerly supplied by burned-out plants must turn to other sources, often at great inconvenience and added expense.

Sadly, the small community with all its eggs in one basket is often the least prepared to protect the bulwark of its economy against fire. Most are unable to afford paid firemen, and some do not even have a volunteer department. Their water systems rarely were designed to handle the fire-fighting requirements of industrial plant exposures. All too many lack building and zoning codes that require fire safeguards to be built into plants (see "On Guard Against Catastrophe," JOURNAL OF AMERICAN INSURANCE, August, 1961).

Yet absence of these community safeguards places even greater responsibility on industrial plant managements to protect lives, assets and jobs against the ravages of fire.

In this task they receive strong assistance from mutual insurance companies. From their beginning in Philadelphia in 1752, the mutual fire insurance companies have emphasized the process known as "improving the risk"—that is, a continuous effort to prevent losses by seeking out and removing fire hazards. One of the chief ways insurers help is by inspecting their policyholders' plants and suggesting ways to eliminate or control any hazards they find.

"We run into all kinds of responses to these inspections," says one seasoned mutual engineer. "Some insureds regard us as infernal nuisances who are likely to cost them money. But for the most part they recognize the value of the service and conscientiously try to follow our recommendations."

Insurers encourage major improvements in fire protection by granting specific rate reductions for such items as fire walls, fire detection systems, automatic sprinklers and watchman services. Note that the emphasis here is not so much on trying to eliminate causes of fire, but on taking measures to prevent fire from burning

→
Mutual insurance paid $2 million loss of property and profits in this fire at Kahoka, Missouri. But employees lost their jobs when Moore Business Forms, Inc., rebuilt the plant in another state.

←
Lack of fire walls and automatic sprinklers allowed a fire started by a cutting torch to spread throughout Fingerhut Manufacturing Company's seat-cover fabricating plant, Princeton, Minnesota.

*Quincy, Illinois, Herald-Whig*

undetected and spreading over large areas. The reasoning is that some fires are going to occur even with the best of prevention programs, so the best safeguard is to find them quickly and keep them small until firemen or the sprinkler system can put them out.

Several recent fires that caused substantial unemployment resulted from failure to observe these principles. In Princeton, Minnesota, an employee was using a cutting torch to make alterations in an overhead conveyer system at the Fingerhut Manufacturing Company, maker of seat covers and other plastic products. A guard posted to watch for sparks left his post for a few minutes, and fire broke out in a barrel of plastic cuttings. The welder tried to put it out with a portable extinguisher, was driven out of the room by thick clouds of black smoke. The flames then spread throughout the unsprinklered, undivided building, a 200-by-252-foot one-story structure classified as "noncombustible." Some 200 employees were thrown out of work by the $835,000 blaze. Either sprinklers or fire walls would have limited the damage.

The same comment applies in the destruction of the General American Transportation Corporation's railroad tank-car assembly plant in Masury, Ohio, which idled 1,200 employees. Fire starting in a paint drying booth spread unhampered and caused a $3 million loss.

When such fires occur, insurance often plays a decisive role in keeping the burned-out firms from bankruptcy and in enabling them to save workers' jobs by rebuilding or finding other quarters. Without adequate coverages, a company may not be able to replace its buildings, buy new machinery, pay the salaries of its key personnel and meet other expenses necessary to get back into production.

Most common shortcomings, according to one insurance expert, are failure to carry enough property insurance to cover the true value of the plant and its contents, and failure to insure the firm's earnings against business interruption losses. The latter often equal or exceed property losses, yet agents still find it difficult to convince many policyholders that earnings protection is a vital form of "unemployment" insurance for a business firm.

Assuming that an industrial plant is well constructed, equipped with good fire protection devices, and properly insured, there still remains one job-insurance measure that is particularly important at a time when unemployment is a national problem. Workers themselves need to be enlisted in the battle against fire by informed, safety-conscious managements. Many already are serving on plant fire brigades, volunteer fire departments, zoning boards and other groups dedicated to fire safety.

Such mutual efforts can go a long way toward achieving some measure of assurance against fires that result in blackouts on property, profits and jobs. ⊙

# FOUR SQUARES FOR SAFETY

*New NFPA marking system protects fire fighters, workers against hidden dangers of materials.*

**HEALTH: blue**

Materials which on very short exposure could cause death or major residual injury even though prompt treatment were given.

Materials which on short exposure could cause serious temporary or residual injury even though prompt treatment were given.

Materials which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given.

Materials which on exposure would cause irritation but only minor residual injury even without treatment.

Materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

DEGREES O

WHEN FIRE BREAKS OUT, the stockpiled materials of industry can become bomb-like threats to life and roadblocks to effective fire fighting. Firemen, who cannot know the properties of unmarked materials, must proceed with caution and fear for their lives. All too often their fears are justified, and their enforced caution permits fires to spread.

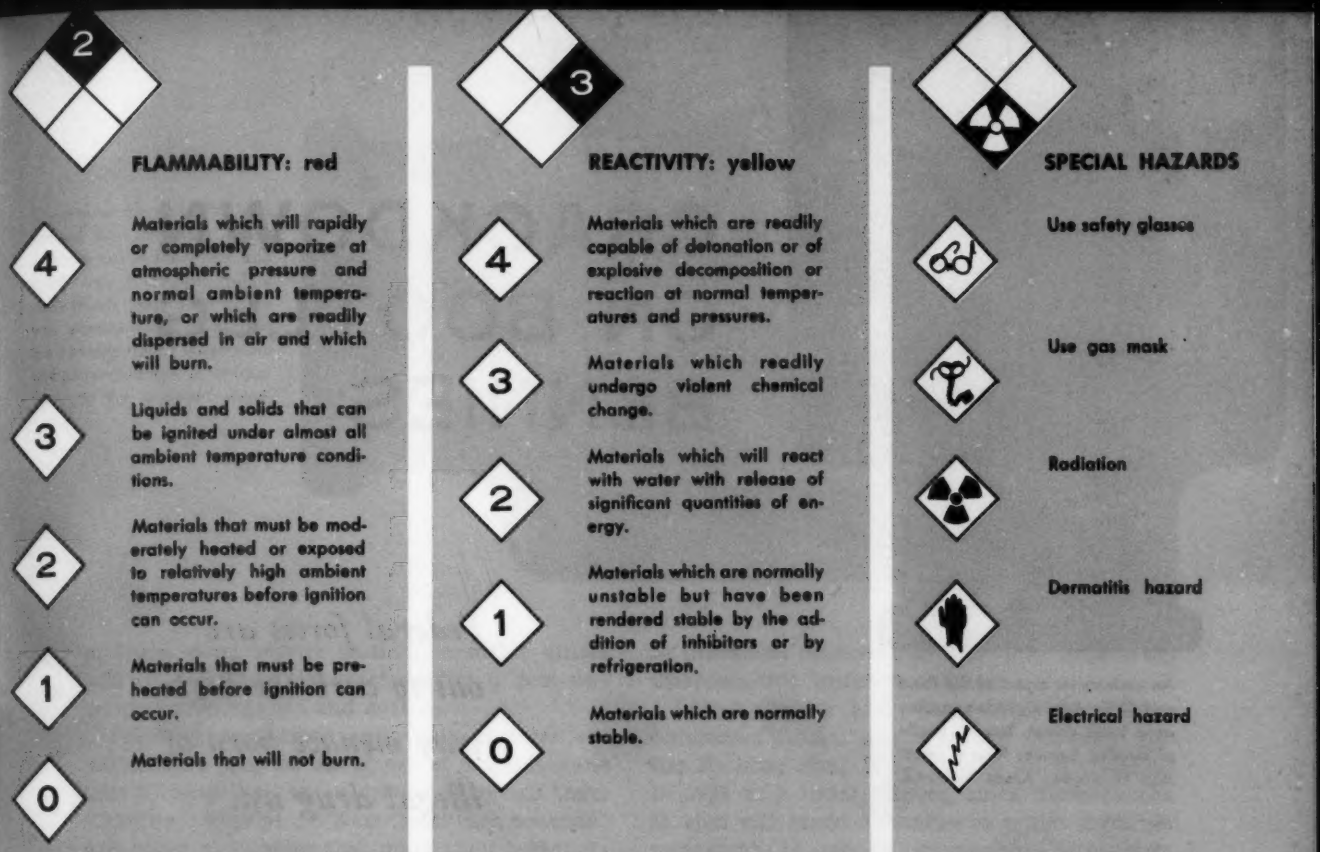
Plants that use hazardous materials are usually careful to identify tanks and large containers and to keep employees informed about their location. But firemen must know quickly if a material is flammable, explosive or toxic. They also must know if it presents a special hazard under fire conditions or if doused with water.

A way to speedily answer these crucial questions has been devised by a committee of the National Fire Protection Association after nearly eight years of consultation and study. Officially named a "Recommended System for the Identification of the Fire Hazards of Materials," the new marking system unmistakably brands four degrees of various hazards.

To firemen these signals of safety appear as colored numbers showing relative hazards: blue for health on the left; red for flammability on top; yellow for reactivity on the right. A fourth square may contain symbols for special hazards, including the magenta-and-yellow symbol for radioactivity. All four symbols are painted on squares in a diamond pattern. Size depends on the distance at which they must be legible.

The system, adopted this year as a recommended guide of NFPA, was drafted by a committee headed by J. Sharp Queener, manager of the safety and fire protection division of E. I. duPont deNemours & Company. He represented the National Paint, Varnish & Lacquer Association; others represented manufacturing chemists, petroleum processors, fire marshals and government agencies.

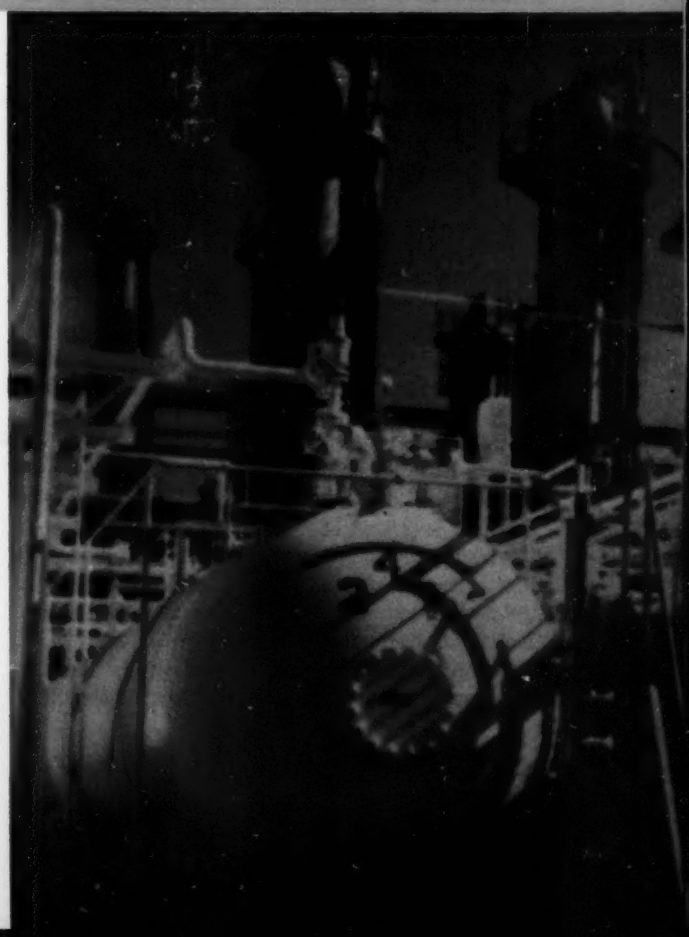
Mutual insurance had a role in development of the system through participation of Alan


2
FLAMMABILITY: red
4
Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature, or which are readily dispersed in air and which will burn.
3
Liquids and solids that can be ignited under almost all ambient temperature conditions.
2
Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
1
Materials that must be preheated before ignition can occur.
0
Materials that will not burn.
3
REACTIVITY: yellow
4
Materials which are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures.
3
Materials which readily undergo violent chemical change.
2
Materials which will react with water with release of significant quantities of energy.
1
Materials which are normally unstable but have been rendered stable by the addition of inhibitors or by refrigeration.
0
Materials which are normally stable.
SPECIAL HAZARDS
Use safety glasses
Use gas mask
Radiation
Dermatitis hazard
Electrical hazard

**O HAZARD SHOWN BY NEW MARKING SYSTEM**

Stevens, supervisor of fire protection service of Liberty Mutual Fire Insurance Company, Boston. Mutual insurance engineers agree that widespread use of the system would reduce fire losses. Maintenance workers would be protected; prefire planning would be facilitated, and plant design engineers could better provide for the safety of personnel. Stevens and others are quick to point out, however, that it takes some years for NFPA recommendations to be put into practice.

At Union Carbide Chemicals Company, where a prototype of the NFPA system has been in use for four years, the safety director concludes: "It's a very good vehicle to develop safety consciousness. It promotes responsibility for operating and handling hazardous materials and for following instructions on their processing, storing and handling." ⊙



Tank containing acetone at Union Carbide Chemicals Company is marked with a blue 2, low health hazard; red 4, high fire hazard; yellow 1, contents stable. Union Carbide pioneered new system.

*National Fire Protection Association*

An undercover agent of the Food and Drug Administration, posing as a truck driver, buys a bottle of bootleg bennies from a truck-stop employee. Arrest followed.

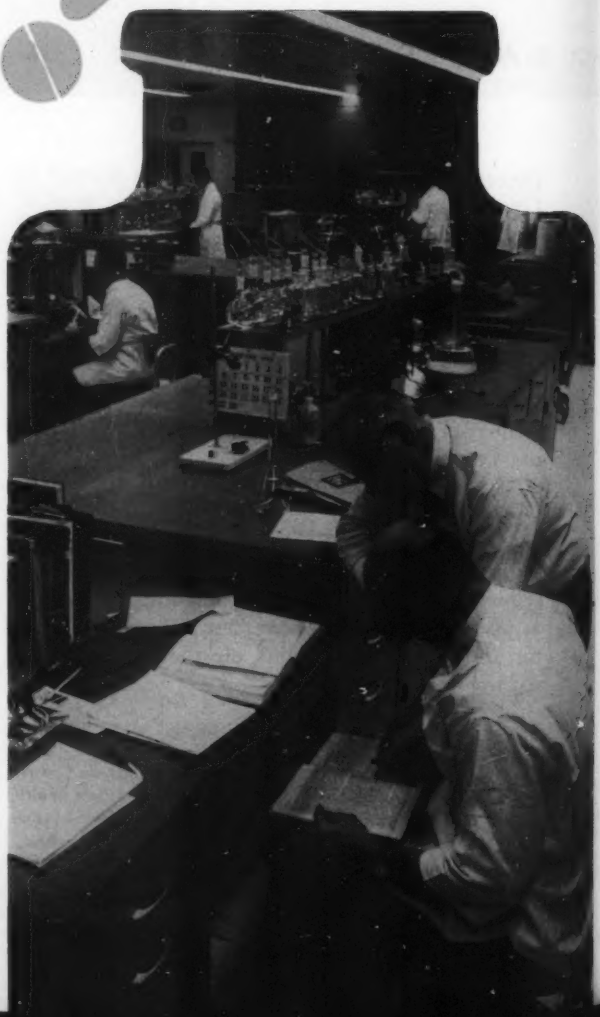
# CRACKDOWN ON BOOTLEG BENNIES

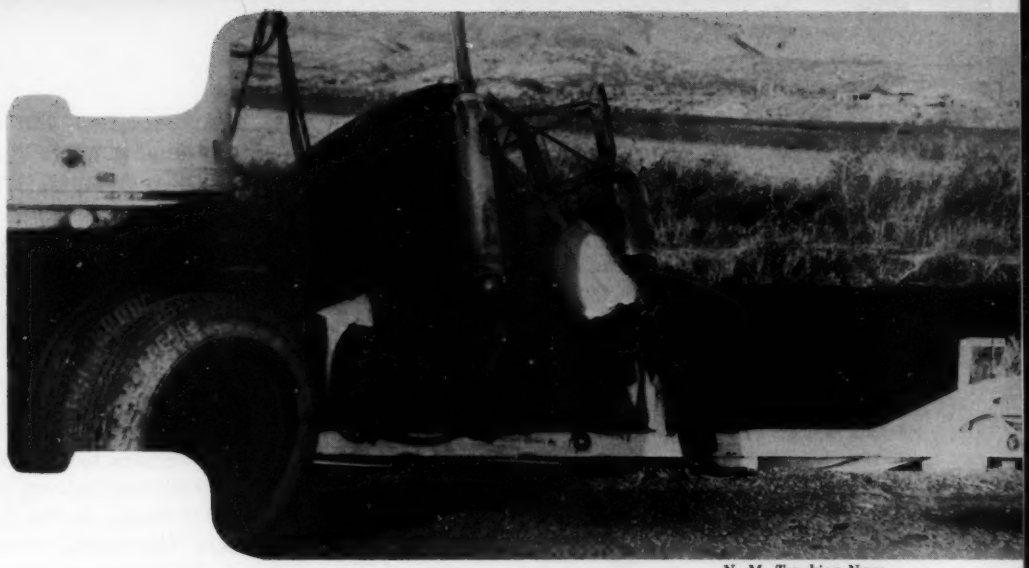
*Federal forces are out to curb the highway menace born of illegal drug use.*

A CRUISING HIGHWAY PATROLMAN came upon the wreck just before sunrise on U. S. 85, two miles south of Hatch, New Mexico. There, on a stretch of smooth, straight highway, a long-haul truck driver had swerved to the wrong side of the road and crashed his tractor-trailer rig through a bridge railing, leaving the left front wheel spinning in the air over a drainage canal.

The driver, unhurt, slumped on the running board and slept as officers and a wrecker crew arrived to free the vehicle and clear the road. Investigators soon discovered the cause of both the wreck and the driver's inability to stay awake: He had been "riding high" on amphetamine sulphate pills for three days, putting in 43½ hours on the road with only 10 hours off to rest. Finally his exhausted body rebelled, and he had "blacked out" suddenly at the wheel.

This driver and thousands of other amphetamine users are victims and coconspirators in an illicit drug traffic that has become a serious highway menace and a contributing factor in juvenile delinquency, crime and drug addiction. Although the pills cannot be sold legally without a doctor's prescription, they are peddled widely





Overuse of amphetamine pills caused this long-haul driver to black out at the wheel and crash into a bridge railing near Hatch, New Mexico. He was photographed asleep on the running board when state patrolmen brought a wrecker to clear the accident scene.

*N. M. Trucking News*

at truck stops, service stations, roadside diners and in back-door transactions by a few unscrupulous druggists and doctors.

Trucking companies and their insurers are particularly worried about use of amphetamine pills by long-haul truck drivers, who call them "bennies," "copilots," "West Coast turn arounds" and other nicknames that mask their treacherous qualities. Taken to prevent drowsiness, the pills enable a driver to keep going far beyond his normal fatigue limits, making him feel mentally and physically alert even when he is drawing on the last dregs of his reserve energy. This overstimulation then produces a sudden letdown often marked by impaired vision, distorted judgment of speed and distance and even loss of consciousness.

Police report finding the pills in the wrecked vehicles of drivers killed when they unaccountably ran off the road, crashed into plainly marked bridge abutments or caused head-on collisions by speeding down the wrong traffic lane. Surviving dosed-up drivers have told of swerving to avoid ghost vehicles and other hallucinations brought on by the drug.

In susceptible individuals, amphetamine produces a state of exhilaration that can lead to aggressive behavior, wild parties and even crimes. Some thrill-seekers become addicted, requiring increasing doses that lead eventually to insomnia, nervous agitation and personality disorders due to brain damage.

Like narcotics and many other potentially dangerous drugs, amphetamine sulphate also has its good side. It first came on the market in 1932 in a nasal inhaler, since discontinued. It also was made available in tablet form for treatment of mental depression, alcoholism, obesity and other conditions.

Unfortunately, thrill-seekers began their own do-it-yourself treatment almost as soon as the inhalers went on sale. They removed the drug-impregnated paper wick and got hopped-up by chewing it or soaking it in coffee. When the drug firm learned of this abuse, it discontinued using amphetamine in inhalers and switched to a nonstimulating drug.

Large-scale bootlegging of the pills began about 1949 when the original patents on amphetamine sulphate expired and dozens of drug firms began turning it out. More than 150 firms now produce the drug.

"Annual production of amphetamine is on the order of 63,000 pounds—enough to make approximately 5.6 billion five-milligram tablets, or about 35 tablets for every man, woman and child in the United States," says Commissioner George P. Larrick of the U. S. Food and Drug Administration. He estimates that less than one-third of these pills are sold legally on doctors' prescriptions; the rest are marketed through illicit channels.

"This is a highly profitable racket," he adds. "Amphetamines can be bought wholesale for as little as $2 per thousand tablets. They often sell for $1 a dozen."

In order to obtain jurisdiction in bootleg drug cases, the Food and Drug Administration must prove that the pills moved across state lines. Sometimes this is done by catching someone in the act of transporting them. But specialists at the FDA laboratories also trace the source of confiscated pills by chemical analysis and a process similar to ballistic tests of bullets. Each pill bears the unique punch mark of the die that formed it. This is compared with known samples.

## *Crackdown on Bootleg Bennies*

With the co-operation of trucking associations, motor fleet insurers and state law enforcement authorities, the FDA is now cracking down vigorously on the traffic in amphetamine pills. Undercover agents began by obtaining jobs with trucking companies, learning to handle the big trailer rigs, and rolling them over the long-haul routes to locate bootleg outlets for the drug. Then they went to work ferreting out sources of the illicit supply. They soon discovered that the drug manages to escape from the legitimate channels of commerce at every level.

In one recent case, FDA agents learned that a former convict posing as a leather goods salesman was distributing bennies to truck stops in eight southeastern states, in cahoots with a drug manufacturing and repacking firm. Agents posing as customers were able to buy 18,000 amphetamine pills from an officer of the firm. When arrested, he was found to have illegally distributed more than 1½ million pills over the past few months and had 800,000 more ready to go. Both the firm and the men directly involved in the bootleg operation were convicted and fined; the salesman was arrested in Tennessee by state authorities and sentenced to one year in jail.

Often the truck drivers who use bennies are themselves peddlers of the pills. One large-scale operation uncovered in the Midwest involved a custom-shirt manufacturer and her truck-driver husband, who teamed up with a Chicago drug store in bootlegging amphetamine pills to truck stops in Illinois and Indiana. An FDA agent struck up an acquaintanceship with the husband and paid him $200 to let him in on the racket by introducing him to the druggist.

"All the way over there he kept flipping a switch-blade knife and talking about his 'snub-nosed .38,' which he planned to use on me if I ever told on him," the agent recalls. After buying more than 30,000 pills, the FDA had the druggist and his accomplices arrested and convicted.

Since their crackdown began in earnest in the fall of 1959, Food and Drug agents have rounded up more than a dozen big-time wholesalers and have prosecuted nearly 300 truck-stop operators and other amphetamine peddlers on charges of selling the pills without prescriptions. Most have been convicted and given fines or jail sentences ranging up to 2½ years.

Insurance companies, trucking associations and the Interstate Commerce Commission also are working with individual trucking firms to halt practices that encourage truck drivers to use bootleg drugs.

"We have found that the drug problem is most prevalent among 'gypsy' truckers and other marginal long-haul operators," says the fleet safety engineer of a large mutual insurance company. "These carriers often permit or require their drivers to violate ICC rules specifying that interstate drivers be given 8 hours off for every 10 hours on the road."

In other instances, drivers may decide to pocket their allowances for food and lodging by driving straight through on what were supposed to have been two- or three-day trips. Reputable trucking companies discourage such practices by keeping close check on their drivers' arrival and departure times, and by using a credit system at hotels and motels along their regular routes instead of giving drivers cash allowances. Insurance fleet engineers often work with truck company supervisors in setting up such procedures.

Despite these efforts, FDA Commissioner Larrick warns that the illicit traffic in bootleg bennies still flourishes, and notes that there is evidence of infiltration into the racket by organized crime. "We are still able to discover violations wherever we look," he said.

In view of the size and seriousness of the drug traffic, Larrick and other federal enforcement officials believe that present laws do not provide adequate controls over the handling of prescription drugs. It is illegal to sell such drugs without a prescription, but not illegal to buy and possess them. Nor are manufacturers, wholesalers and retailers required to maintain full records on the shipment and sale of such drugs. Bills to accomplish these goals have been introduced in Congress from time to time, but to date have not been successful.

So long as amphetamine pills are readily available through bootleg channels, the public will continue to suffer the consequences of their misuse by overtired drivers, thrill-seekers and criminals. However, individuals can still see to it that all drugs taken by their own families are used strictly according to a doctor's directions and can support local law enforcement efforts to curb the menace of bootleg bennies. ⊙

*Ace Studio*

Charles H. Silva, in his multi-titular post, has an insurance division staff of 12 members.

# SILVA OF HAWAII

STATE OF HAWAII 1959

HAWAII was eulogized by Mark Twain as "the loveliest fleet of islands that lies anchored in any ocean." Hawaiians are proud of that. But the promise they are holding out to businessmen and insurers is that the 50th and newest state of the Union is a land of full employment; percentage growth in personal income leads all other states, and construction volume exceeds states with much larger populations.

Although situated 2,400 statute miles southwest of San Francisco, seven-island Hawaii is now only 4½ hours away by jet and is closer to America than any other important body of land. It is our farthest south state (Alaska is farthest west), our only island state, our only tropical state and our most mountainous state, area for area. Racial tensions, as commonly understood, are non-existent in the cosmopolitan population of 632,772.

Hawaii has been a natural commercial crossroads ever since the early whaling fleets made winter rendezvous there. But its own economy has transcended the historic mainstays of sugar, pineapples and tourism. Diversified manufacturing, dominated by steel, cement, plastics and electronics, has become a major force in Hawaii's future. In 1959 alone it contributed some $130 million in gross income; the outlook for the 1960-70 decade is even brighter.

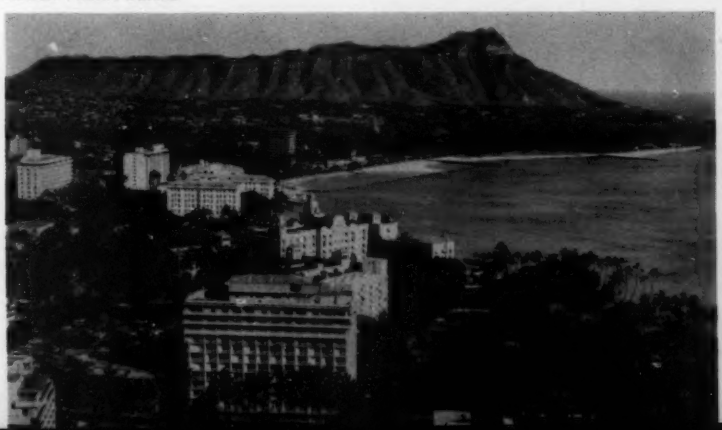
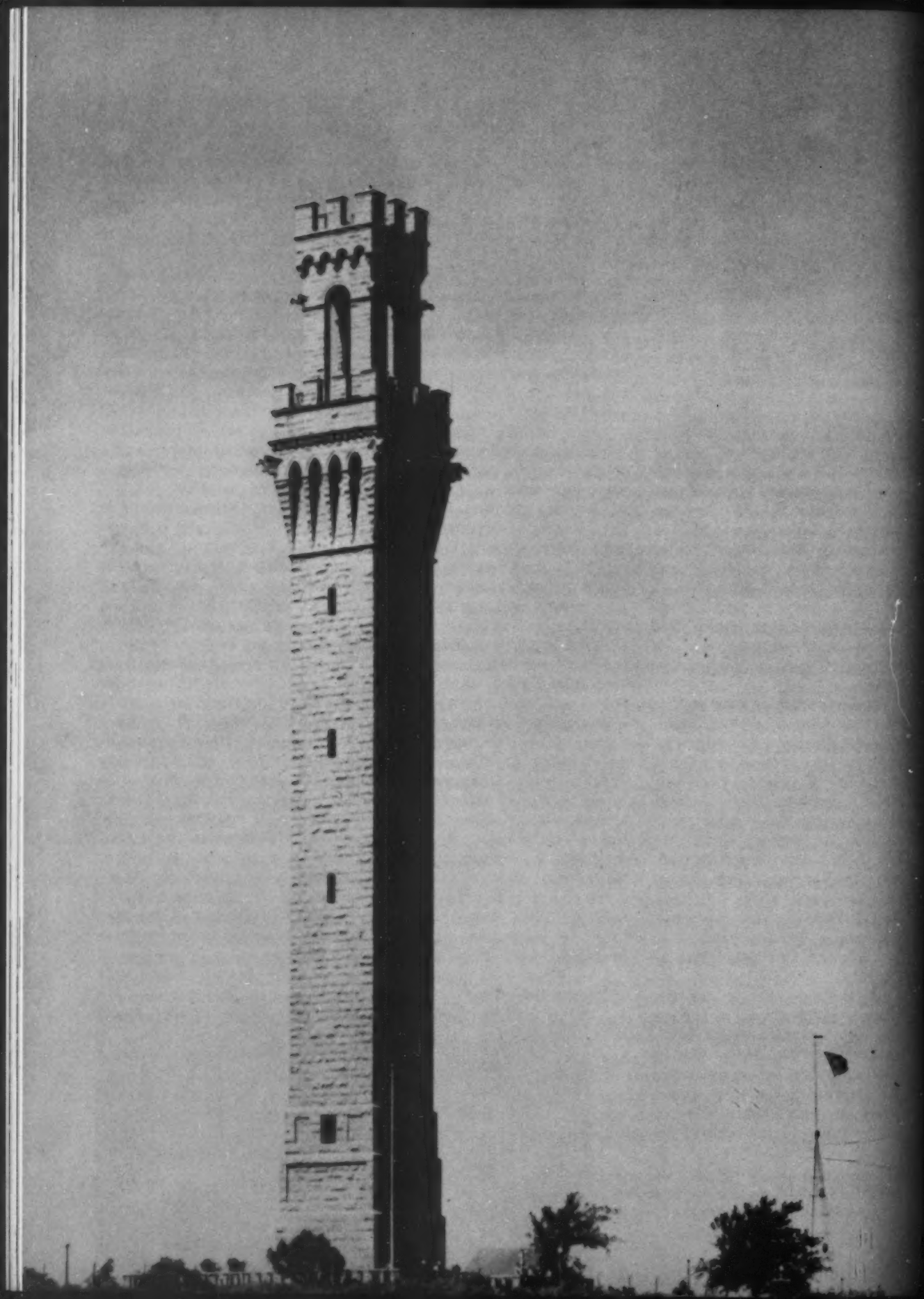
For insurance underwriters, one of the unique characteristics of Hawaii is its pattern of land use and availability, linked with the housing situation. That pattern evolved from an ancient system of crown land, chiefs' and subchiefs' land and small farms. Today the state government controls some 1,320,000 of the 4,118,000 acres, and another 1,238,000 are held by 12 large landowners, including plantation and ranch companies, trusts and estates. State-wide, land is now owned or leased in about 50-50 proportions.

Insurance is a many-sided boon to Hawaii's growing economy. Total insurance company investments in Hawaii have increased almost six-fold since 1950 to a total of more than $253 million in 1959. In addition, insurers maintained Hawaii bank balances of nearly $5 million at the close of 1959. Taxes and fees paid by insurance companies that year were $1,891,421, and losses met were more than $32.6 million. Dividends to policyholders were $4.7 million. Premium volume for 1959 was $80.5 million.

Since 1925 the number of insurance companies doing business in the state has increased from 142 to 313, a number of which are mutual property and casualty companies with home offices on the mainland.

Insurance Commissioner Charles H. Silva is also treasurer in the Department of Treasury and Regulation, commissioner of securities, bank examiner and fire marshal. He is a native son of Honokaa and was a dentist by profession for 23 years after receiving his doctor's degree from St. Louis University, Missouri. He has served an even longer career in Hawaiian public affairs, having been elected a state senator in 1935 and re-elected regularly to serve until 1951 in every committee of the senate, either as chairman or member. In 1950 he was a delegate to the Hawaii State Constitutional Convention, in 1953 he was appointed director of the Department of Institutions to 1960, and in January of that year was appointed state treasurer. ⊙

*Hawaii Visitors Bureau*



Waikiki Beach with 100 hotels and other resort spots is the pole-star in Hawaii's multimillion-dollar business in tourism.